

ORDER on TRUE UP for FY 2008-09 & FY 2009-10 and AGGREGATE REVENUE REQUIREMENT for FY 2011-12 NORTH DELHI POWER LIMITED



## DELHI ELECTRICITY REGULATORY COMMISSION

AUGUST, 2011

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#### List of Abbreviations

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



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



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



## A1: INTRODUCTION

1.1 This Order relates to the petition filed by North Delhi Power Limited (hereinafter referred to as 'NDPL' or the 'Petitioner') for true up of uncontrollable expenses for FY 2009-10 and approval of Aggregate Revenue Requirement (ARR) and Wheeling and Retail Supply Tariffs for all consumer categories for FY 2011-12 using Multi Year Tariff Principles specified in the Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2007 (hereinafter referred to as the 'MYT Regulations').

#### **Transfer Scheme**

- 1.2 Prior to the year 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 (hereinafter referred to as 'Delhi'). The Government of National Capital Territory of Delhi (hereinafter referred to as 'GoNCTD'), however, notified the Delhi Electricity Reform (Transfer Scheme) Rules, 2001 (hereinafter referred to as 'Transfer Scheme') on 20 November, 2001 and provided for unbundling of DVB into different entities handling generation, transmission and distribution of electricity.
- 1.3 The Transfer Scheme provided for unbundling of DVB and the transfer of existing distribution assets of DVB in the areas of North and North West of Delhi to North Delhi Power Limited (formerly known as North North West Delhi Distribution Company Limited) and the transfer of the distribution assets in other areas of Delhi were transferred to two other distribution companies. All the three distribution companies shall hereinafter be collectively referred to as 'DISCOMs'.

## North Delhi Power Limited (NDPL)

- 1.4 NDPL is a company incorporated under the Companies Act, 1956 and is entrusted with the business of distribution and retail supply of electricity in the specified area of North and North West of Delhi in the NCT of Delhi (as specified in the Transfer Scheme).
- 1.5 Till 31 March, 2007, Delhi Transco Limited (DTL) was the sole entity responsible for the bulk procurement and bulk supply of power in Delhi. All the DISCOMs in Delhi had to purchase power from DTL at an approved Bulk Supply Tariff (BST) based on their capacity to pay. On 28 June, 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 (hereinafter referred to as the 'Act') and stated the following:
  - (a) With effect from April 1, 2007, the responsibility for arranging supply of power in 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.



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(Sunita Yadav)

- (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 GoNCTD.
- (c) The DERC would have to make arrangements on the various existing Power Purchase Agreements (PPAs) between the present Distribution Companies in a manner to take care of different load profiles of the three DISCOMs, the New Delhi Municipal Council (NDMC) and also the Military Engineering Services (MES).
- (d) While addressing the issue of transition to 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 The business of Bulk Supply of electricity is no longer a part of the business of DTL, and the same is vested with the distribution licensees (DISCOMs) of the State, w.e.f. April 1, 2007.
- 1.7 The PPAs of the existing and upcoming projects were assigned to the DISCOMs; vide the Commission's Order dated March 31, 2007. In the same Order, the Commission ordered for introduction of Intra state ABT in Delhi w.e.f April 1, 2007 with the following conditions:
  - (a) The UI rate should be the same as prescribed by CERC as on March 31, 2007. All the five Distribution Companies/ Agencies as well as DTL shall comply with the various provisions of the IEGC/ Regulations issued by CERC in this regard.
  - (b) The SLDC shall act as the nodal agency for the collection and distribution of UI charges as far as ABT is concerned.
  - (c) Scheduling be followed as is being practiced which is also generally in conformity with the procedure followed by NRLDC.
  - (d) STU/SLDC shall exercise necessary control in transmission/ load dispatch, system protection as specified in the Act, IEGC, Regulations of CERC, CEA, Rules etc.
  - (e) Any Violations of the Act, Rules, Regulations, IEGC etc. shall be brought to the notice of the Commission by STU/SLDC.

## **Delhi Electricity Regulatory Commission (DERC)**

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



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Act 2000 (hereinafter referred to as 'DERA'). The Act mandates the Commission to take measures conducive to the development and management of the electricity industry in an efficient, economic and competitive manner.

#### **Functions of the Commission**

- 1.10 The Commission derives its powers from DERA as well as from 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, properties and interest in properties concerned or related to the electricity industry in the National Capital Territory of Delhi including the conditions governing entry into, and exit from the electricity industry in such manner as to safeguard the public interest;
  - (g) to issue licenses for transmission, bulk supply, distribution or supply of electricity;
  - (h) to regulate the working of the licensees; and
  - (i) to adjudicate upon the disputes and differences between licensees.
- 1.11 The functions assigned to the Commission under the Act are as follows:

"Section 86 (1) 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;



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- (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: -.

- (i) promotion of competition, efficiency and economy in activities of the electricity industry;
- (ii) promotion of investment in electricity industry;
- (iii) reorganisation and restructuring of electricity industry in the State;
- (iv) matters concerning generation, transmission, distribution and trading of electricity or any other matter referred to the State Commission by that Government."
- 1.12 As part of the tariff related provisions of the Act, the State Electricity Regulatory Commission (SERC) has to be guided by the National Electricity Policy, National Tariff Policy and the National Electricity Plan.



#### **The Coordination Forum**

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

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	
17th Meeting	August 13, 2009	
18th Meeting	October 12, 2009	
19th Meeting	November 12, 2009	
20th Meeting	December 18, 2009	
21st Meeting	February 19, 2010	
22nd Meeting	October 1, 2010	
23rd Meeting	January 19, 2011	

#### Table 1: Meetings of Coordination Forum

1.15 In the Co-ordination forum meeting held on January 19, 2011, the DTL/SLDC informed that Grid Coordination Committee has already reviewed Delhi Grid Code 2008 and recommended the amendments considering the views of all the members i.e.



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Distribution Licensees, IPGCL/PPCL. The Commission directed the DTL/SLDC to finalise the amendments to enable the Commission notify the amended grid code expeditiously.

- 1.16 The Commission again directed and advised Distribution Licensees to expedite the transformers dry replacement of oil filled by type transformers in residential/commercial buildings in compliance to the Commission Order dated 20.01.2010 to avoid any untoward incidents. The Commission further advised wherever 11 kV oil filled switchgear is also installed along with oil filled distribution transformers in residential/commercial buildings, the same should also be replaced to make the premises oil free.
- 1.17 The Commission expressed concern over the frequent accidents taking place in park and sub-stations located in road side, safety of human beings, equipment and continuity of supply being of paramount importance. DISCOMs informed that in case of new pole mounted sub-stations, fencing is being provided on feeder pillars to safeguard human lives. The Commission directed the DISCOMs to conduct a safety audit and ensure proper fencing, locking arrangements and grounding of the fencing as per code of practice for earthing.

## Multi Year Tariff Regulations and Extension of the Control Period

- 1.18 The Commission issued a Consultative Paper and Draft MYT Regulations for Generation, Transmission and Distribution to all concerned stakeholders, including the Government, Generation Companies, Transmission and Distribution Licensees, consumers. 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.
- 1.19 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.
- 1.20 The Commission issued regulations vide notification dated May 30, 2007 specifying Terms and Conditions for Determination of Tariff for Generation, Transmission and Distribution of electricity under the Multi Year Tariff (MYT) framework for the period FY 2007-08 FY 2010-11 after going through the public hearing process.
- 1.21 The Commission vide its Order dated May 10, 2011 extended the MYT Regulations and the Control Period for a further period of one year up to March 31, 2012.

## Filing of Tariff Petition for true up of expenses for FY 2008-09

#### Filing of Petition

1.22 The Petitioner has filed its petition before the Commission on December 1, 2009 for true up of uncontrollable expenses for FY 2008-09 under Section 62, 64 and 86 of the Electricity Act, 2003, read with the MYT Regulations, 2007.



#### Acceptance of Petition

1.23 The Commission admitted the petition vide its Order dated January 5, 2010 subject to clarifications, if any, which would be obtained from the Petitioner from time to time. A copy of the Admission Order dated January 5, 2010 is enclosed as Annexure I to this Order.

# Filing of Petition for True Up of expenses for FY 2009-10 and approval of ARR for FY 2011-12

#### **Filing of Petition**

1.24 The Petitioner has filed its petition before the Commission on May 31, 2010 and June 2, 2010 for true up of uncontrollable expenses for FY 2009-10 and on March 22, 2011 for approval of Aggregate Revenue Requirement (ARR) and Wheeling and Retail Supply Tariff for all consumer categories for FY 2011-12 under Section 62, 64 and 86 of the Electricity Act, 2003, read with the MYT Regulations, 2007.

#### Acceptance of Petition

1.25 The Commission admitted the petition for true up of uncontrollable expenses for FY 2009-10 vide its Order dated October 11, 2010 and petition for approval of Aggregate Revenue Requirement (ARR) and Wheeling and Retail Supply Tariff for all consumer categories for FY 2011-12 vide its Order dated April 25, 2011 subject to clarifications, if any, which would be obtained from the Petitioner from time to time. A copy of the Admission Order dated October 11, 2010 and April 25, 2011 is enclosed as **Annexure II** and **Annexure III** respectively to this Order.

#### **Interaction with the Petitioner**

- 1.26 The Order has referred at numerous places to various actions taken by the "Commission". It may be mentioned for the sake of clarity, that the term "Commission" in most of the cases refers to the Staff of the Commission and the Consultants appointed by the Commission for carrying out the due diligence on the petitions filed by the utilities, obtaining and analysing information/clarifications received from the utilities and submitting all issues for consideration by the Commission.
- 1.27 For this purpose, the Commission Staff and Consultants held discussions with the Petitioners, obtained information/clarifications wherever required and carried out technical validation with regard to the information provided.
- 1.28 The role of the Commission has been to hold public hearings and to take the final view with respect to various issues concerning the principles and guidelines for tariff determination. The use of the term "Commission" may, therefore, be read in the context of the above clarification. The Commission has considered due diligence conducted by the Staff of the Commission and the Consultants in arriving at its final decision.



- 1.29 The Commission conducted a preliminary scrutiny/analysis of the petition submitted by the Petitioner and observed certain deficiencies. Accordingly, deficiency notes were issued to the Petitioner. Further, the Commission solicited additional information/ clarifications from the Petitioner as and when required. The Petitioner submitted the additional information through various letters, as listed in Table 3.
- 1.30 The Commission interacted regularly with the Petitioner to seek clarifications and justification on various issues essential for the analysis of the petition.
- 1.31 The Commission also conducted multiple validation sessions with the Petitioner during which discrepancies in the petition and additional information required by the Commission were sought. Subsequently, the Petitioner submitted replies to the issues raised in these sessions.
- 1.32 As part of the discussion, the Commission provided an opportunity to the Petitioner to validate the data submitted for True-Up of FY 2008-09 / FY 2009-10 and provide documentary evidence to substantiate its claims. The Commission and the Petitioner also discussed key issues raised in the petition, which included details of capital expenditure and capitalisation plan, allocation of expenses into Wheeling and Retail Supply Business, AT&C loss reduction trajectory, liability towards SVRS expenditure, etc.
- 1.33 The Petitioner submitted its replies, as shown below, in response to the queries raised by the Commission, which have been considered for approval of the ARR of the Petitioner:

S. No.	Date	Letter No.	Subject
1.	31.05.2010	-	Filing of Petition for approval of True-Up for F.Y. 2009-10
2.	02.06.2010	-	Filing of Petition for approval of True-Up for F.Y. 2009-10
3.	19.06.2010	-	Filing of Revised Petition for approval of True-Up for F.Y. 2009-10
4.	21.03.2011		Filing of Petition for Review of FY 2010-11 and ARR for FY 2011-12
5.	19.04.2011	NDPL/DERC/ARR/201 1-12	ARR Petition for 2011-12 and True-Up for FY 2009-10 – Reply to the Deficiency Memo/Additional Information dated 18.04.2011
6.	21.04.2011	NDPL/DERC/ARR/201 1-12/2	ARR Petition for 2011-12 and True-Up for FY 2009-10 – Reply to the Deficiency Memo/Additional Information dated 18.04.2011
7.	27.04.2011		Request for clarification as regards obligation of DISCOMs to furnish comments to the stakeholders against their objections/suggestions.
8.	25.05.2011	NDPL/DERC/2010- 11/5	Additional Information for ARR 2011-12
9.	09.06.2011	ND/OPS/PM&CC/DER C	Submission of Information on Short Term Power Purchase
10.	14.06.2011	NDPL/DERC/ARR/201 1-12/5	ARR Petition for 2011-12 and True-Up Petition for FY 2009-10 – Replies pursuant to Technical Session held on 31.05.2011
11.	21.06.2011	NDPL/DERC/ARR/201 1-12	ARR Petition for 2011-12 and True-Up Petition for FY 2009-10
12.	24.06.2011		Reply to the queries raised during prudence check meeting

#### Table 2: List of Correspondence with NDPL



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#### NORTH DELHI POWER LIMITED

S. No.	Date	Letter No.	Subject	
13.	29.06.2011		Information/Clarification sought by the Hon'ble Commission	
14.	29.06.2011		Information on CPI/WPI	
15.	01.07.2011	ND/OPS/PM&CC/DER C	Discrepancy in Power Purchase Data submitted by DISCOMs vis-avis SLDC	
16.	12.07.2011	NDPL/CCM/3	Discrepancy in Power Purchase Data submitted by DISCOMs vis-à-vis SLDC	
17.	20.07.2011		Information/clarification sought by the Hon'ble Commission	
18.	20.07.2011	NDPL/CCM/3	Information required vide Commission's letter dated 13.07.2011	
19.	27.07.2011		Information/clarification sought by the Hon'ble Commission vide letter dated 26.07.2011	
20.	28.07.2011		Information/clarification sought by the Hon'ble Commission vide letter dated 27.07.2011	
21.	01.08.2011		Detail of Rebate for FY 2007-08	
22.	27.07.2011		Information/clarification sought by the Hon'ble Commission vide letter dated 26.07.2011	
23.	01.08.2011		Information/clarification sought by the Hon'ble Commission vide letter dated 26.07.2011	
24.	02.08.2011	NDPL/CCM/3	Request for NDPL's claim seekingrefund of excess transmission charges to be adjusted in FY 2011-12 ARR of DTL, levied earlier by Hon'ble Commission in DTL's Tariff Order of 20.12.2007.	
25.	03.08.2011		Information/clarification sought by The Hon'ble Commission.	
26.	04.08.2011		Information/clarification sought by the Hon'ble Commission	
27.	05.08.2011		Surplus Power Sale Details for Quarter I of FY 11-12.	

## **Public Hearing**

- 1.34 The Petitioner published a Public Notice on May 7, 2011 indicating the salient features of its petition for true up of uncontrollable expenses for FY 2009-10 and approval of Aggregate Revenue Requirement (ARR) and Wheeling and Retail Supply Tariff for all consumer categories for FY 2011-12, for inviting responses from the stakeholders, in the following newspapers:
  - (a) Hindustan Times (English)
  - (b) Live Mint (English)
  - (c) Hindustan (Hindi)
- 1.35 Copies of the Public Notice in English and Hindi are enclosed as Annexure IV to this Order. A detailed copy of the petition was also made available for purchase from the head-office of the Petitioner on any working day from May 09, 2011 to May 24, 2011 between 11 A.M. and 4 P.M. on payment of Rs 100/-. A complete copy of the petition was also made available on the website of the Commission, as well as that of the Petitioner, requesting for comments of the stakeholders thereon.



- 1.36 The Commission also published a Public Notice inviting comments from stakeholders on the petitions filed by the distribution licensees for true up of uncontrollable expenses for FY 2009-10 and approval of Aggregate Revenue Requirement (ARR) and Wheeling and Retail Supply Tariff for all consumer categories for FY 2011-12 in the following newspapers with their respective dates of publication:
  - (a) Times of India (English) May 12, 2011.
  - (b) Hindustan Times (English) May 11, 2011.
  - (c) Nav Bharat Times (Hindi) May 11, 2011.
  - (d) The Daily Milap (Urdu) May 11, 2011.
  - (e) Daily Educator (Punjabi) May 11, 2011.
- 1.37 Interested consumers and stakeholders were requested to file their objections and suggestions on the petition by May 28, 2011. Copies of the above Public Notice in English, Hindi, Punjabi and Urdu are attached as **Annexure V** to this Order.
- 1.38 At the request of the stakeholders, the Commission extended the last date for filing objections and suggestions on the petitions filed by the distribution licensees for true up of uncontrollable expenses for FY 2009-10 and approval of Aggregate Revenue Requirement (ARR) and Wheeling and Retail Supply Tariff for all consumer categories for FY 2011-12 to June 5, 2011. The Public Notice in this regard was published in the following newspapers with their respective dates of publication:
  - (a) Times of India (English) May 29, 2011
  - (b) Hindustan Times (English) May 29, 2011
  - (c) Nav Bharat Times (Hindi) May 28, 2011
  - (d) The Daily Milap (Urdu) May 28, 2011
  - (e) Daily Educator (Punjabi) May 28, 2011
- 1.39 Copies of the above Public Notice in English, Hindi, Punjabi and Urdu are attached as **Annexure VI** to this Order.
- 1.40 The Hon'ble High Court of Delhi in its Order dated May 23, 2011 in Writ Petition Civil No. 4821/2010 in the matter of Sh. N. K. Garg Vs. Govt. of NCT of Delhi interalia directed the Commission to proceed afresh by following due procedure and do the needful regarding determination of Tariff. The Commission observed that True Up for FY 2008-09 was an integral part of the tariff petitions filed by the DISCOMs for approval of ARR and Wheeling and Retail Supply Tariff for all consumer categories for FY 2010-11. At this stage, when FY 2010-11 is already over, determination of tariff for FY 2010-11 becomes irrelevant, but True Up for FY 2008-09 survives. Accordingly, in compliance of the said directions of the Hon'ble High Court of Delhi,



the Commission published a Public Notice on June 12, 2011 inviting comments from stakeholders on the True Up petition for FY 2008-09 filed by the distribution licensees in the following newspapers:

- (a) Times of India (English)
- (b) Hindustan Times (English)
- (c) Nav Bharat Times (Hindi)
- 1.41 Interested consumers and stakeholders were requested to file their objections and suggestions on the petition by June 25, 2011. Copies of the above Public Notice in English and Hindi are attached as **Annexure VII** to this Order.
- 1.42 At the request of the stakeholders, the Commission extended the last date for filing objections and suggestions on the petitions filed by the distribution licensees for true up of uncontrollable expenses for FY 2008-09 to July 1, 2011. The Public Notice in this regard was published on June 25, 2011 in the following newspapers with their respective dates of publication:
  - (a) Times of India (English)
  - (b) Hindustan Times (English)
  - (c) Nav Bharat Times (Hindi)
- 1.43 Copies of the above Public Notice in English, Hindi, Punjabi and Urdu are attached as **Annexure VIII** to this Order.
- 1.44 In the past, the Commission had received requests from stakeholders to extend help to the consumers in understanding the ARR petitions and filing their comments. In this regard the Commission prepared a document highlighting the salient features of the tariff petitions filed by the distribution licensees, which was hosted on the Commission's website. The Commission also appointed two of its officers who were available to all interested stakeholders for discussion on ARR petitions and related matters after seeking prior appointment. This was duly highlighted in the Public Notices brought out by the Commission.
- 1.45 The Petitioner/Commission received comments from 405 stakeholders. The Petitioner responded to the comments of the stakeholders and submitted a copy of its response to the Commission. The Commission invited all stakeholders who had filed their objections and suggestions to attend the Public Hearing. The list of stakeholders who responded to the public notice on ARR and tariff petitions is provided as Annexure IX and Annexure X to this Order. The list of stakeholders who attended the public hearing is provided as Annexure XI to this Order.
- 1.46 The public hearing was held at the Commission's Court Room on the following dates, in 8 sessions, to discuss the issues related to the petition filed by the Petitioner for true up of expenses for FY 2008-09, FY 2009-10 and approval of ARR and Wheeling and Retail Supply Tariff for FY 2011-12.



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	Date	Time	Category
1	July 4, 2011	10:30 AM – 1:30 PM	Domestic
2	July 4, 2011	2:30 PM – 5:30 PM	Domestic
3	July 5, 2011	10:30 AM – 1:30 PM	Domestic
4	July 5, 2011	2:30 PM – 5:30 PM	Domestic
5	July 6, 2011	10:30 AM – 1:30 PM	Non Domestic and Industrial
6	July 6, 2011	2:30 PM – 5:30 PM	Non Domestic and Industrial
7	July 7, 2011	10:30 AM – 1:30 PM	Government and NGO
8	July 7, 2011	2:30 PM - 5:30 PM	Government and NGO

#### Table 3: Schedule for Public Hearing

1.47 The issues and concerns voiced by various stakeholders have been examined by the Commission. The major issues discussed during the public hearing by the respondents and views of the Commission, have been summarized in Chapter A2 of this Order.

#### Layout of the Order

- 1.48 This Order is organised into seven Chapters:
  - (a) Chapter A1 provides details of the tariff setting process and the approach of the Order;
  - (b) Chapter A2 provides a detailed account of the Public Hearing process, including the comments of various stakeholders, the Petitioner's responses and views of the Commission;
  - (c) Chapter A3 deals with the true up of expenses for FY 2008-09;
  - (d) Chapter A4 deals with the true up of expenses for FY 2009-10;
  - (e) Chapter A5 analyses the Aggregate Revenue Requirement for Wheeling and Retail Supply Business for FY 2011-12;
  - (f) Chapter A6 details the possible options for determination of Wheeling and Retail Supply Tariff for all consumer categories, and the approach adopted by the Commission; and
  - (g) Chapter A7 details of the Directives of the Commission.
- 1.49 The Order contains the following Annexure, which are an integral part of the Tariff Order.
  - (a) Annexure I Admission Order dated January 25, 2010 on True Up Petition for FY 2008-09;



- (b) Annexure II Admission Order dated October 11, 2010 on True Up Petition for FY 2009-10;
- (c) Annexure III Admission Order dated April 25, 2011 on ARR for FY 2011-12;
- (d) Annexure IV Copies of Public Notices published by DISCOMs on True Up Petition for FY 2009-10 and ARR for FY 2011-12;
- (e) Annexure V Copies of Public Notice published by the Commission on True Up Petition for FY 2009-10 and ARR for FY 2011-12;
- (f) Annexure VI Copies of Public Notice published by the Commission for extension on timeline for submission of comments on True Up Petition for FY 2009-10 and ARR for FY 2011-12;
- (g) Annexure VII Copies of Public Notice published by the Commission on True Up Petition for FY 2008-09;
- (h) Annexure VIII Copies of Public Notice published by the Commission for extension on timeline for submission of comments on True Up Petition for FY 2008-09;
- (i) Annexure IX List of Respondents who submitted their comments on True Up Petition for FY 2008-09;
- (j) Annexure X List of Respondents who submitted their comments on True Up Petition for FY 2009-10 and ARR for FY 2011-12;
- (k) Annexure XI List of Stakeholders who attended the Public Hearing; and
- (1) Annexure XII Analyses of purported surplus of Rs 3577 Crore during FY 2010-11.

#### **Performance Review**

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

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

1.51 The Commission sought inputs on overall Standards of Performance prescribed in Schedule-II of the Delhi Electricity Supply Code and Performance Standards Regulations, 2007. The details submitted by NDPL are given in Table 4.



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Service area	<b>Overall Standard of Performance</b>	Standard of performance achieved
Normal fuse-off calls	At least 99% calls received should be rectified within prescribed time limits in both cities and Towns and in Rural areas	99.76%
Line Breakdowns	At least 95% of cases resolved within time limit in both Cities and Towns and in Rural area	99.3%
Distribution Transformer failure	At least 95% of DTRs to be replaced within prescribed time limits in both Cities and Towns and in Rural areas	89.5%
Period of scheduled outage		
Maximum duration in a single stretch	At least 90% of cases resolved within time limit	99.0%
Restoration of supply by 6:00 PM		99.1%
Street Light Faults		
Rectification of line faults	At least 90% cases should be complied	98.5%
Replacement of fused / defective unit	within prescribed time limits	
Continuity Indices *		•
SAIFI	To be laid down by the Commission	8.63
SAIDI	based on the targets proposed by the Licensees.	5.69
MAIFI		0.014
Frequency variations	To maintain supply frequency within range as per IEGC.	Coordinating with other network constituents to maintain frequency
Voltage Unbalance	Maximum of 3% at point of commencement of supply	100%
Percentage billing mistakes	Not exceeding 0.2%	0.08%
Percentage faulty meters	Not exceeding 3%	2.53%

Table 4: Overall Standards of Performance for	r April 2009 – March 2010
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Table 5: Overall Standards of Performance for April 2008 to March 2009

Service area	Overall Standard of Performance	Standard of performance achieved
	At least 99% calls received should be rectified	99.67% - Urban area
Normal fuse-off calls	within prescribed time limits in both cities and Towns and in Rural areas	99.94% - Rural area
Line Breakdowns	At least 95% of cases resolved within time limit in both Cities and Towns and in Rural area	99.25%
Distribution Transformer failure	At least 95% of DTRs to be replaced within	89.69% (urban)
	prescribed time limits in both Cities and Towns and in Rural areas	89.69% (rural)
Period of scheduled outage		
Maximum duration in a single stretch	At least 95% of cases resolved within time limit	98.80%
Restoration of supply by 6:00 PM	At least 55% of cases resolved within time limit	98.85%



Street Light Faults		
Rectification of line faults	At least 90% cases should be complied within	98.54%
Replacement of fused / defective unit	prescribed time limits	
Continuity Indices*		
SAIFI		5.17
SAIDI	To be laid down by the Commission based on the targets proposed by the Licensees.	6.837
MAIFI	angels proposed by the Electrisees.	0.004
<b>Frequency variations</b> To maintain supply frequency within range as per IEGC.		100.00%
Voltage Unbalance	Maximum of 3% at point of commencement of supply	100.00%
Percentage billing mistakes	Not exceeding 0.2%	0.10%
Percentage faulty meters	Not exceeding 3%	2.00%

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

## **Approach of the Order**

Under the MYT Framework, the Commission has projected the ARR for the 1.52 Petitioner for each year of the Control Period in the MYT Order issued on February 23, 2008 (hereinafter referred to as the 'MYT Order'). The MYT Regulations provide that actual expenses incurred by the Petitioner in respect of the uncontrollable parameters shall be trued up at the end of the respective Financial Year based on the actual/audited accounts and as per the provisions of the MYT Regulations. This Tariff Order relates to the True-Up of the uncontrollable expenses for FY 2008-09 and FY 2009-10 under the Multi Year Tariff framework and determination of Aggregate Revenue Requirement for FY 2011-12. The Petitioner has made its submission for true up for FY 2008-09, FY 2009-10 and with ARR for FY 2011-12. Further, the Petitioner has also submitted the revised ARR for FY 2010-11 for review.

#### Approach for True up

1.53 The true up for FY 2008-09 and FY 2009-10 is to be carried out as per the provisions of the Electricity Act, 2003 and the MYT Regulations. Under the MYT Regulations, the components of ARR have been segregated into Controllable and Uncontrollable Parameters. The MYT Regulations provide that the Uncontrollable Parameters shall be trued up based on the audited accounts and the Controllable Parameters shall not be trued up. As per clause 4.16 of the MYT Regulations:

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

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



- (b) For controllable parameters,
  - *(i)* Any surplus or deficit on account of O&M expenses shall be to the account of the Licensee and shall not be trued up in ARR; and
  - (ii) Depreciation and RoCE shall be trued up at the end of Control Period.
- 1.54 Some of the issues raised by the Petitioner has raised several issues are presently under appeal before the Hon'ble Supreme Court, Hon'ble High Court and Hon'ble Appellate Tribunal of Electricity. Pending the decision of the Court/Tribunal on such issues, the Commission has decided to follow the stand it has already taken in this regard.
- 1.55 In view of the above, the Commission has trued up the uncontrollable parameters viz. power purchase cost, energy sales and revenue based on the audited accounts and other information submitted by the Petitioner for FY 2008-09 and FY 2009-10 after the prudence check. In regard to controllable parameters the Commission is of the view that the MYT Regulations do not permit any true up of controllable parameters. For other components such as impact of Sixth Pay Commission, and cost of new initiatives, the Commission is of the view that these components can be considered if there are new developments which permit consideration and such consideration is within the applicable regulatory framework. The detailed treatment of each component is provided in Chapter A3 (for FY 2008-09) and Chapter A4 (for FY 2009-10) of this Order.

#### Approach for FY 2010-11

1.56 The Petitioner in its petition has requested for a revision of the ARR for FY 2010-11 which had been determined earlier by the Commission in its MYT Order dated February 23, 2008. The mechanism for true up as specified in the MYT Regulations envisages that variations on account of uncontrollable items like energy sales and power purchase cost shall be trued up. Truing up shall be carried out for each year based on actual / audited accounts and prudence checks undertaken by the Commission. Accordingly, the Commission is of the opinion that in accordance with the Regulations, the true up of FY 2010-11 can only be considered based on the audited financial statement once the Petitioner makes a regular tariff petition for true up of FY 2010-11.

#### Approach for FY 2011-12

- 1.57 The Petitioner has submitted the ARR petition for the FY 2011-12 along with the true up petition for FY 2008-09 and FY 2009-10.
- In this regard the following provision of the MYT Regulations, Tariff Orders, etc. 1.58 pertaining to Distribution business are relevant:
  - Regulation 3.2 ARR for Wheeling Business and ARR for Retail Supply (a) business to fix the Wheeling Tariff and Retail Supply Tariff separately.



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- (b) Regulation 4.5 & 4.6 Base line values (operating and cost parameters) and performance targets.
- (c) Performance Targets Covered by Regulation 4.7 and 4.8 and includes AT&C loss, O&M expenditure, Return on capital employed, Depreciation and quality of supply.
- (d) Regulations 4.10, 4.11 and 4.12 relate to sales forecast
- (e) Regulation 5.28 relates to ARR for Retail Supply Business for each year of the Control Period and shall contain-
  - (i) Cost of Power Procurement
  - (ii) Transmission and Load Dispatch Charges and
  - (iii) Supply Margin
- (f) Para 5.1 of MYT Order, inter alia, provides that:

"The uncontrollable parameters include power purchase cost and Sales, which may require year to year revision. Since the Power Purchase cost represents approximately 75 % of the ARR, to take care of any variation in uncontrollable parameters, the Commission has fixed the tariff till 31<sup>st</sup> March, 2009"

- (g) The allocation from the unallocated quota of Power at the disposal of GoNCTD may change from time to time and needs to be considered based on the latest available data or the Commission may have to make reasonable assumptions with respect to allocation of Power from the unallocated quota.
- (h) Availability of Power from the new sources of generation, based on their actual / revised Commissioning schedule.
- (i) Variation in sales and sales mix based on the data available subsequent to the issue of MYT Order in February 2008.
- 1.59 Based on the provisions of the MYT Regulations and the Commission's decision on extending the Control Period upto FY 2011-12, and other reasons discussed above, the Commission is of the view that the sales forecast and Power Purchase quantum and cost is to be examined based on the principles of the MYT Regulations for determination of ARR for FY 2011-12. These are dealt with in greater detail in Chapter A5 of this Order.



#### A2: **RESPONSE FROM STAKEHOLDERS**

#### Introduction

- 2.1 Public hearing being a platform to understand the problems and concerns of various stakeholders, the Commission has always encouraged transparent and participative approach in the hearings, which are used to obtain necessary inputs required for tariff determination.
- 2.2 The public hearing was held at the Commission's Court Room from July 4, 2011 to July 7, 2011 to discuss the issues related to the petition filed by the Petitioner for true up of expenses for FY 2008-09, FY 2009-10 and approval of ARR and Wheeling and Retail Supply Tariff for FY 2011-12. In the Public hearing stakeholders put forth their comments/suggestions before the Commission in the presence of the Petitioner. The Petitioner was given an opportunity to respond to the comments put forth by the stakeholders.
- 2.3 The Commission has examined the issues and concerns voiced by various stakeholders in their written comments as well as in the Public hearing and also the response of the Petitioner thereon. The comments/ suggestions submitted by various stakeholders in response to the ARR petition, the replies given by the Petitioner and the views of the Commission have been summarized under various sub-heads as below:

#### **Rationalization of Fixed Charges**

#### **Stakeholder's View**

- 2.4 Some of the stakeholders objected to the levy of fixed charges. A section of the stakeholders has recommended that the practice of levy of fixed charges should be altogether discontinued. Some other have submitted that the levy of fixed charges by private distribution companies should be rationalized and scaled down to the level of fixed charges being levied by NDMC to consumers in its designated area.
- 2.5 Some of the stakeholders submitted that in case fixed charges are levied, these should be adjustable in energy charges as was being done earlier with minimum charges. The fixed charges should not be recovered from a consumer who is using the electricity and paying huge bills.
- 2.6 To this effect, some of the stakeholders also suggested that fixed charges should be replaced by minimum charges.

#### **Petitioner's Submission**

- 2.7 The Petitioner submitted that the issue of the implementation of the two part tariff i.e. a fixed charge and an energy charge has already been explained in detail in the earlier Tariff Orders of the Commission.
- 2.8 The Petitioner has submitted that fixed charges as part of tariff is levied to cover the



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fixed expenses / costs incurred by distribution licensees for providing electricity to consumers. Distribution licensees are required to establish and maintain infrastructure and network corresponding to the sanctioned / connected load of the Consumers to ensure uninterrupted power supply irrespective of actual consumption of electricity. These fixed charges are considered towards revenue available for tariff determination. Further, distribution companies are also paying fixed / capacity charges to the bulk suppliers of electricity like NTPC, NHPC etc.

- 2.9 Nevertheless, in the response filed by the Petitioner, it was explained that the rationale for levying fixed charges is to recover a part of the fixed cost of the utility so that at least a part of the fixed cost is recovered even if there is no consumption by the consumer. The fixed charge component in a two part tariff is aimed at defraying the capital related and other fixed costs.
- 2.10 The Electricity Act 2003 (Section 45) also provides for a two-part tariff. Section 45(3) provides for the levy of fixed charges. This section states that: "*The charges for electricity supplied by a distribution licensee may include (a) a fixed charge in addition to the charge for actual electricity supplied;*"
- 2.11 The Commission in the Tariff Schedule notified in the Tariff Order dated 28th May 2009 has considered Fixed Charges as a part of the Tariff Schedule, implying that the income from such charges needs to be considered as a part of total revenue.
- 2.12 Further, as per provisions of the Electricity Act 2003, tariff fixation is the sole prerogative of the Commission and the matter may be looked into by the Commission such that all legitimate costs including returns, etc, as per the MYT Regulations are recovered through tariff.

#### **Commission's View**

- 2.13 The Commission had explained the rationale of two-part tariff and the reasons for introduction of fixed charges in its previous Tariff Orders. While doing so, the Commission abolished the Monthly Minimum Charges (MMC).
- 2.14 In view of the suggestions received from the various stakeholders, the Commission has reviewed the various options for levying fixed charges. The Commission has considered options such as fixed charges per connection, fixed charges linked to consumption, fixed charges linked to sanctioned load in kW, etc. When a consumer is connected to the system, the utility has to provide/allocate certain capacity of the distribution system to serve the consumer. In addition to this, some expenses such as meter reading, billing, bill delivery, maintenance etc. are fixed in nature and independent of energy consumption. Ideally, the fixed charges levied on the consumer after considering the fixed cost of such system and diversity of load in the system.
- 2.15 Section 45 (3) of Electricity Act, 2003 also provides for the levy of fixed charges. This Section states that : *"The charges for electricity supplied by a distribution licensee may include – (a) a fixed charge in addition to the charge for actual electricity supplied;"*



- 2.16 The Commission in its Tariff Order dated 26 June, 2003 had introduced fixed charges for most of the categories to recover certain component of the fixed costs.
- 2.17 The Commission would also like to point out that if fixed charges are removed, the energy charge would increase correspondingly as these forms a part of total revenue of the utility. Therefore, whether only energy charge is levied or energy charge as well as fixed charge is levied, the same ARR would have to be recovered from the consumers.
- 2.18 The Commission is of the opinion that the best method of levying fixed charges is on the basis of the sanctioned load, as other options do not representatively reflect the cost of providing the capacity requirements of the consumer. After analysing all the options of levying fixed charges, the Commission continues with the existing methodology of levying fixed charges.

## **Metering and Meter Testing**

#### Stakeholder's View

- 2.19 Some of the stakeholders submitted that the electronic meters installed by the Distribution licensees are faulty and running fast. With regard to complaints of fast running of electronic meters, it has been suggested that the Commission should give direction to the Distribution licensees to install mechanical meters in series with the electronic meters to resolve this controversy.
- 2.20 The stakeholders suggested that the consumer complaints of suspected fast running meters be checked by an external agency at consumers' site to the satisfaction of the consumers. It has been also suggested that while replacing old meters with new electronic meters, the Distribution licensees should properly check the wiring of concerned premises and ensure that there are no snags in wiring and there will be no over-billing.
- 2.21 The Stakeholders expressed concern over the accuracies of the electronic meters. It was submitted that the accuracy level of  $\pm 2.5\%$  is on the higher side considering the sensitivity of the electronic meters.
- 2.22 The Stakeholders submitted that staff of the Distribution licensees verifies the meters on frequent basis (sometimes even weekly) and, it is observed that the field staff which visits the premises for verification, is mostly the staff of the contractors and not authorized personnel of the Distribution licensees.
- 2.23 Some of the industrial consumers also complained against the dismal conditions of the meters or feeder posts, which were recently installed. They have also suggested that there should be special training programs for the line-men, as they are the key persons in all matters pertaining to the meter.
- 2.24 Some of the stakeholders submitted that Delhi does not have any independent meter testing facility and that the meters are, currently, tested in the laboratories owned by the Distribution licensees. The Stakeholders have objected that the process of meter



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testing in the laboratories owned by the Distribution licensees is improper and have requested that an independent meter testing facility should be established by the Government. The consumers have also requested the Commission to devise a procedure for testing of meters.

#### **Petitioner's Submission**

- 2.25 The Petitioner submitted that the meters are procured from only "A" class manufacturers and numbers of steps are being taken at every stage starting from vendor selection to procurement to manufacturing to testing and final supply of meters to ensure that the meters are error free.
- 2.26 The Petitioner also submitted that all meters procured by it conform to BIS standard and Electronic Meters installed are ISI marked which are tested for quality and accuracy as per IS 13779:99 prior to installation. It is technically/commercially not feasible / viable to make meter which has 0% error. The margin of error allowed is +/- 2.5% under the field conditions as per IS 15707-2006 Indian Standard for Testing, Evaluation, Installation and maintenance of AC Electricity Meters Code of Practice issued by Bureau of Indian Standards. The Petitioner also ascertained that the electronic meters are accurate up to the limits specified by the Central Electricity Authority. The prescribed permissible tolerance limit is ±1% under the lab conditions.
- 2.27 The Petitioner to assuage the feelings of the public at large, informed that it has been running a commercial call centre, where any consumer may lodge its complaints regarding fast meters and the Petitioner will get the meter checked in presence of the consumer. If the meter is found to be running fast, the meter will be replaced at no cost to the Consumer and his bills will be adjusted accordingly.
- 2.28 The Petitioner submitted that in cases of burnt meters, replacement of meter is done within 48 hours and temporary direct connection is provided until the burnt meter is replaced. However, in the cases of theft, the meters are disconnected and no temporary connection is provided.
- 2.29 The Petitioner clarified that agencies that can undertake meter testing are required to be accredited by NABL and the meter testing laboratory owned by it is also accredited to NABL. The Petitioner informed that in Delhi, there are two certified agencies namely; CPRI and ERTL other than the laboratories of the Distribution licensees and both these agencies are permitted to carry out meter testing. The Petitioner has assured that the process followed for testing the meter in its laboratory is fair and transparent.

#### **Commission's View**

2.30 Under the Electricity Act 2003, Central Electricity Authority (CEA) has notified the Regulations on installation and operation of meters on 17 March 2006, wherein it is specified that all the meters shall conform to the relevant BIS standards. BIS has also laid down IS-15707:2006- Standard for Testing, Evaluation, Installation and maintenance of AC Electricity Meters – Code of Practice. The standard provides that the accuracy of meters for consumers shall be  $\pm 1\%$  in laboratory conditions and  $\pm$ 



2.5% in field conditions. A copy of the meter test report has to be provided to the consumer whose meter has been tested.

- 2.31 The Commission has already appointed ERTL, Okhla, New Delhi, which is a NABL accredited Government laboratory as an independent third party Agency for undertaking testing of meters in their lab at Okhla.
- 2.32 Also, the Commission has vide its Order dated 30 October 2009, appointed CPRI, Sahibabad, which is also an NABL accredited government Laboratory as Third Party Meter testing agency for on-site testing of the accuracy of meters at Delhi.
- 2.33 The Commission will endeavour to appoint one or two more competent meter testing agencies during the coming years to provide adequate choice to the consumers of Delhi.
- 2.34 The Electronic meters have an LED indication for earth leakage or neutral looping at the consumer premises. The Distribution licensees shall also inform the consumer if such leakage is observed at the time of meter reading etc.
- 2.35 The Commission will be finalising a revised and detailed meter testing and meter sealing protocol shortly after the issue of this Order. This will be given wide publicity.

## AT&C Loss Reduction

#### Stakeholder's View

- 2.36 Some of the stakeholders expressed their displeasure at the target of 1% of loss reduction fixed by the Commission. They feel that such a target is too low given the good performance of the Distribution licensees, as claimed by them in the recent past. The stakeholders have also stated that according to regulation 5.3 of the MYT Distribution Regulations for any Control Period, the distribution loss must be at least 20% of the total loss reduction target for the Control Period. This implies that the loss reduction target for the extended period of 2011-12 should be at least 3.4% (20% of 17%) for BRPL, 4.4% (20% of 22%) for BYPL, 3.4% (20% of 17%) for NDPL instead of 1% reduction in loss levels.
- 2.37 It has been suggested that area-wise (or district-wise) AT&C losses should be calculated and special rebates/services should be introduced to encourage the low loss areas to keep up with their good performance. Some even suggested that areas in which AT&C losses are much lower than the general Delhi level, those areas should be spared from load shedding to encourage AT&C loss reduction in other areas as well.
- 2.38 The losses claimed to have occurred on account of AT&C are the direct results of inefficient management of power distribution set up. The stakeholders have also submitted that the Commission should take strong action against the Petitioner for their ineffectiveness to plug losses as the consumers have to suffer for the inefficiency of the Distribution licensees. The stakeholders are of the view that if honest and sincere efforts are made by the Distribution licensees, these losses can be plugged and



the increase of tariff can be checked. Some of the stakeholders have opined that there appears to be no incentive for the Distribution licensees to bring down AT&C losses, as these losses are borne by the consumers. It has been suggested that to the extent a DISCOM fails to achieve its target, the shortfall in revenue should be borne by the DISCOM itself.

- 2.39 Some of the stakeholders also suggested that the Distribution licensees should share with RWAs the AT&C loss levels for their specific areas. Further, stakeholders wanted to have information on distribution transformers-wise (DT) losses published on the Distribution licensees' websites. Also, DTs with loss level greater than 30% should be disconnected and those with loss levels less than 30% should be given incentives.
- 2.40 A few of the stakeholders also suggested that new consumers as well as bulk consumers like DMRC, DJB and other HT consumers (at 66KV) should be excluded while calculating AT&C losses.

# **Petitioner's Submission**

- 2.41 The Petitioner has submitted that since privatisation, the Distribution Licencees have been given stiff targets on year to year basis, including MYT period (2007-11) and they have not only achieved these targets but also bettered them.
- 2.42 In regards to the same, NDPL has specifically mentioned that AT&C Losses in their area are approaching acceptable minimum technical loss levels and every incremental percentage decrease in loss will be extremely difficult in the case of technical losses and commercially unviable to secure in terms of human effort as well as capital investment. Hence, the extremely stiff loss reduction target set by Commission for FY 2011-12 is going to challenge NDPL beyond its limit. It has also pointed out that Abraham Committee constituted by Govt. of India, Ministry of Power has suggested that the AT&C Loss reduction target should be 1% p.a., if the utility losses are below 20%. Further, under R-APDRP, the long term AT&C Loss Level target suggested is 15%.
- 2.43 The Petitioner has submitted that district-wise losses are prepared and submitted on monthly basis to DERC, in line with their directions. However, to control power thefts active participation and support is needed from all the stakeholders.
- 2.44 The Petitioner has submitted that the benefit of reduction in AT&C losses is passed on to the consumers. Additional revenue generated from reduction of AT&C losses is adjusted to reduce the revenue gap primarily arising from uncontrollable costs like power purchase etc thus resulting in benefit to the consumers by way of lower tariff hike requirements.

# Commission's View

2.45 Under the Multi Year Tariff (MYT) Regulations, year-wise targets for AT&C loss reduction were prescribed based on the past achievements on loss reduction, capital expenditure programs, review of the consumer mix of Delhi, metering status, loss



levels in similar urban distribution licensees, such as Ahmedabad Electricity Company, BEST and BSES, Mumbai, etc.

- 2.46 Substantial incentives have been built in for achieving and exceeding the loss reduction targets. If the Distribution licensees are not able to achieve the specified target levels, the losses on this account are borne by the Distribution licensees themselves. Benefit on account of reduction in AT&C losses is shared between the consumers and the Distribution licensees in accordance with the provisions of the MYT Regulations.
- 2.47 The Commission has extended the Control Period of the MYT Regulations, 2007 for one more year up to 31<sup>st</sup> March 2011-12 following due process of law and in consideration of the written comments received from the stakeholders as well as received at the time of Public Hearing, the Judgement of the Hon'ble Supreme Court in Appeal no. 3902 of 2006 in the matter of PTC India Limited versus Central Electricity Regulatory Commission and other relevant Orders of the Hon'ble Supreme Court and Hon'ble Appellate Tribunal for electricity, relevant provisions of the Electricity Act, rules and regulations made there under.
- 2.48 In respect of fixation of AT&C loss targets for FY 2011-12, the Commission noted the general trend of trajectory for target loss reduction during the Control Period (FY 07-11) as well as the actual performance as claimed by the DISCOMs during FY 2010-11. The Commission felt that it is in the public interest to consider the earlier trajectory and at the same time ensure that the target is lower than actual achievement during FY 2010-11. The Commission observed that the progressive reduction in AT&C losses is necessary for reducing power purchase so that the consumers are benefitted through a reduction in ARR.
- 2.49 Hence, in view of the above reasons, the Commission has decided that the following target levels are reasonable and fair for both, DISCOMs and the average consumer:

(i).	BYPL	-	18%
(ii).	BRPL	-	15%
(iii).	NDPL	-	13%

- 2.50 Further, the loss levels below the above levels in case of BRPL, BYPL and NDPL will qualify for 50:50 sharing of profit upto a further reduction of 1% and with 100% profit being retained by the Distribution licensees, if the losses are more than 1% below the targets specified. The Commission has already directed the Distribution licensees to post the distribution transformer wise/District-wise AT&C losses on their respective websites. The Commission has observed that the Ring Fencing of the Districts is not complete. To have a comprehensive view on the AT&C losses areawise (district-wise), the Commission directs that the districts may be ring fenced to know the exact losses in the respective areas to enable the Commission to take a view on the differential tariffs.
- 2.51 Regarding load shedding in theft prone areas, the Commission is of the view that Distribution licensees should make all out efforts to prevent theft of electricity by strengthening their enforcement activities without harassing the paying consumers.



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- 2.52 Regarding change in methodology for calculation of AT&C loss, the Commission is of the view that the bulk consumers/other HT consumers (at 66kV) were part of the opening loss level, which were calculated at the time of unbundling of erstwhile DVB in February, 2002. Therefore, it may not be appropriate to change the calculation methodology midway as any change in the methodology would render the comparison of AT&C loss levels invalid.
- 2.53 In order to effectively check AT&C losses in high loss areas, the Commission is directing the utilities to reduce losses by 10% in one year in the zones/districts of the utility where losses are above 30%. Failure to do so will invite penalties.

# Load Shedding

# Stakeholder's View

2.54 The stakeholders also submitted that they should be informed prior to the load shedding. Some of the stakeholders also pointed out that with the installation of the Electronic Energy Meters, it is possible to have the feature for downloading the data for the number and duration of supply interruptions either due to supply failure or due to load shedding and the same should be made available to the consumers along with their bills.

# Petitioner's Submission

- 2.55 The Petitioner explained that the quality of power and its reliability cannot be solely determined by the service commitment of the Petitioner but is contingent upon several factors that are beyond its control, such as grid supply conditions, constraints in DTL system, SLDC instructions, etc. The Petitioner distributes electricity, transmitted through PGCIL / DTL network from the Generators (and received at various DTL interface points), through the Petitioner's sub transmission system and distribution network to the consumers.
- 2.56 Regarding additional features in electronic meters as suggested by some of the stakeholders, the Petitioner submitted that the meters are as per BIS and CEA Regulations for recording essential parameters and capturing of tamper events. However, additional parameters as suggested can be captured /recorded but the same would increase the cost of meters substantially and apart from this the downloading of information would require additional resources and increase the operational costs. Therefore, a cost benefit balancing is required in this regard.
- 2.57 NDPL has submitted that it is making capital investment to upgrade & modernize distribution infrastructure with the objective of lending techno-commercial benefits to the consumers. The Petitioner has stated that it follows an annual maintenance schedule & preventive maintenance of the distribution equipments to ensure reliable power supply to its consumers. Also, advance intimation to consumers on load-shedding is an ongoing process through Munadi (for Planned Shutdowns) and hand-outs through newspapers (for seasonal load-shedding schedule). A regular power update is being sent to the media in connection with the scheduled shut downs for maintenance. The same is also being uploaded on the NDPL website (scheduled



outages) section. The advanced load shedding schedule is being made and distributed to NDPL consumers as newspaper insert and also through CCC and RWA's meetings.

## **Commission's View**

- 2.58 The Commission has taken note of the suggestions made by the stakeholders and is of the view that Distribution licensees should arrange adequate power through long term/short term procurement/banking/bi-lateral arrangements etc.
- 2.59 The Commission vide Order dated 21 October, 2009 has already directed that "Distribution Licensees shall endeavour to maintain uninterrupted power supply in their respective areas. The Distribution Licensees shall inform the consumers in advance, about the anticipated disruption in power supply due to any reason (including maintenance schedule, breakdowns, load-shedding etc.), except Force-majeure events which are beyond the control of the Licensee. The Licensee shall ensure that the electricity which could not be served due to any reason what-so-ever (including maintenance schedule, breakdowns, load-shedding etc.) shall not exceed 1% of the total energy supplied in units (kWh) by them in any particular month, except in the case of force-majeure events which are beyond the control of licensee" and "In case the disruption in power supply exceeds the limit prescribed above, for any particular month, the licensee shall be liable to a penalty which may extend upto Rs.5 Lakh for every two Lakh kWh units un-served."
- 2.60 The Petitioner should undertake augmentation and maintenance of the distribution network to minimise the failure of supply due to breakdowns.
- 2.61 The Commission agrees with the view of the stakeholders that the energy meters should have additional features for recording of duration of interruptions. The Commission has already prescribed that duration of disruption of supply (no supply hours) in the current billing period be indicated in the electricity bills. In this regard the Commission has also uploaded revised uniform format for the Electricity Bills for all the Distribution licensees.

# Transparency in DISCOM's Accounts

# Stakeholder's View

- 2.62 Many of the stakeholders submitted that there seems to be a large number of anomalies in the Petitioner's accounts. The stakeholders alleged that distribution companies in Delhi are manipulating their accounts by fraudulent and illegal means to the disadvantage of general public. It has been also alleged that Distribution licensees have indulged in procurement of capital goods from sister concerns at much higher prices.
- 2.63 The stakeholders demanded that Distribution licensees' accounts should be audited by Comptroller and Auditor General of India (CAG).
- 2.64 The stakeholders also demanded that since electricity distribution companies are public utilities, they should come under the preview of Right to Information Act.



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Since Government of Delhi have 49% stake in distribution companies, Distribution licensees cannot deny information to the consumers.

#### **Petitioner's Submission**

- 2.65 With regard to manipulation and misrepresentation of accounts, the Petitioner submitted that their accounts are audited both internally and externally by statutory auditors as per the requirements of the Companies Act, 1956. The Commission also undertakes detailed scrutiny of the accounting statements before allowing the expenses in the ARR proceedings.
- 2.66 In regard to the C&AG Audit, the Petitioner submitted that as they do not receive any government support in the form of grants, loan or funding etc. and hence they are not covered under the C&AG Audit. Moreover, the C&AG can audit accounts of government companies only.
- 2.67 As per the license conditions, the Petitioner is required to prepare annual accounts up to the thirty-first day of March each year, and render an annual statement of its audited accounts along with auditor's report, within a period of nine months from the aforesaid date, to the Commission. The licensee is complying with this condition and there is no room left for any misreporting of figures.
- 2.68 The Petitioner submitted that it is not a government run company but a private business entity, therefore not subjected to the provisions of the RTI Act.

#### **Commission's View**

- 2.69 The Commission is of the view that the Petitioner is a company incorporated under the provisions of the Companies Act, 1956 where a majority of shares are privately held. The accounts of the company are audited internally and by statutory auditors as per the requirements of the Companies Act 1956.Presently, there is no provision of CAG audit in respect of private companies.
- 2.70 However, in deference to overwhelming public sentiment in favor of CAG audit of account of DISCOMs and with a view to bringing transparency in the functioning of the DISCOMs, Commission reiterates its recommendation to the Delhi Government to have the accounts of DISCOMs audited for MYT period starting from 2007-08. The Commission feels that an exception can be made in case of private companies considering that 49% of the share holding is with the government/ public and precedence exists in case of private telecom companies where CAG auditors conducted an audit on the recommendations of the Ministry.
- 2.71 The Commission has also given a direction to the Distribution licensees to maintain the Regulatory Accounts separately. The Commission reiterates its direction to the Petitioner to submit the Regulatory Accounts maintained by them to the Commission for scrutiny every year along with the filing of petition.
- 2.72 In the meantime, the Commission has decided to frame Regulations for instituting a system of independent scrutiny of financial and technical data submitted by the



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licensees in line with the draft SERC compliance audit regulations for the regulated entities prepared by Forum of Regulators.

- 2.73 The Commission is of the view that Distribution licensees are Public Utilities and they must comply with the provisions of Right to Information (RTI) Act, 2005. The said opinion of the Commission pertaining to the status of Distribution licensees in the RTI Act was upheld by the Central Information Commission (CIC) in its Order dated 30 November 2006.
- 2.74 The said impugned Order of the CIC was subsequently challenged before the Hon'ble High Court of Delhi by the Distribution licensees and the said Order was stayed by the Hon'ble High Court. The Commission as one of the Respondents in this matter has filed its reply before the Hon'ble High Court of Delhi reiterating its stand that the distribution licensees should be covered under the RTI.

# Use of electricity poles for other business

# Stakeholder's View

- 2.75 Some of the stakeholders pointed out that cable operator using electricity poles to tie up their cables should be charged.
- 2.76 A few of the stakeholders even suggested that these electricity poles should be put to use for other business also, so that revenue generated from these business could be used to reduce the revenue gap for the DISCOM.

# **Petitioner's Submission**

2.77 The Petitioner submitted that the charges decided by the Commission are already being charged from cable operators for usage of electricity poles.

# **Commission's View**

2.78 The Commission has, in Petition No. 04/2005 in the matter of "Disallowing Cable TV Operators & MTNL from using NDPL Poles, unauthorisedly and for paying usage charges per pole basis, wherever authorized", observed that though the Commission is seized of the Order issued by the Maharashtra Electricity Regulatory Commission, it still holds the opinion that subject to safety standards imposed by the Indian Electricity Rules and the Order of Hon'ble High Court in writ petition (Civil) 4731/96, the Licensees are within their rights to use their assets for other business for earning additional revenue. Further, rights lie with the licensees to enter into independent agreement with such cable operators and they can lease their assets subject to the provisions of the safety norms under Electricity Rules 1956 or such Regulations prepared by CEA under section 53 of Electricity Act, 2003 and Commission's Regulations on Treatment of Income from other Business. The Commission further observed that Distribution Licensees may refer their case to the Central Electricity Authority regarding the safety related issues of leasing electricity poles to the Cable TV operators etc. and if the Authority deems it appropriate, it may incorporate the same in the Regulations. The Commission would like the DISCOM to



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explore all possible measures for raising revenue. This is necessary to reduce the impact of rising cost on retail tariff.

# **Physical Verification of Assets**

#### Stakeholder's View

- 2.79 Some of the stakeholders contended that ARR should be considered only once the process of physical verification of assets / capital expenditure is complete. The Administrative Staff College of India (ASCI) Hyderabad had been entrusted by the Commission to come up with a report on the same. The stakeholders have requested the Commission to make the status of this report public.
- 2.80 Some of the stakeholders also pointed out that the Fixed Asset Register (FAR) of the Distribution licensees is incomplete and not being maintained properly. FAR must be completed before any further capitalisation of assets.

#### **Petitioner's Submission**

- 2.81 The Petitioner further submitted that the ARR petition has no linkage with physical verification activity. The physical verification activity can be considered by the Commission.
- 2.82 The Petitioner has submitted that on the result of ASCI report, the Commission may like to respond.

# Commission's View

- 2.83 The State Advisory Committee in its Meeting held on 01 June 2011 advised that the task of physical verification of assets and formulation of Fixed Assets Register may be assigned to the Institute of Chartered Accountants of India who have extensive experience in carrying out similar assignments. The Commission also noted that Delhi State Spatial Data Infrastructure Project' (DSSDIP) has taken up complete GIS mapping of the electrical network/assets of the Distribution licensees. The Commission intends to utilise the data created by DSSDIP in respect of physical verification of assets for the Distribution licensees for creation of the FAR. For this purpose, ICAI has been requested to formulate a proposal for physical verification of assets after working out the modalities for integration of the data created by DSSDIP.
- 2.84 The Commission has directed all the Distribution licensees to complete the mapping of its divisions by end of September, 2011 and submit data to 'Delhi State Spatial Data Infrastructure Project' (DSSDIP). All the data division-wise should be uploaded on the website of the Distribution licensee by October 15, 2011. Further to that, DSSDIP shall draw up a protocol for regular up-dation of network on a quarterly basis.
- 2.85 The Commission also intends to take up this matter with the IT department of GoNCTD for allocation of lease line to distribution licensees to view the data relating to GIS mapping.



# **Power Purchase Cost Adjustment Mechanism**

#### **Stakeholder's View**

- 2.86 Majority of the stakeholders opposed the implementation of the proposal for automatic power purchase price adjustment. They have stated that under this mechanism there will be no provision for public responses and public hearing before any change in tariff.
- 2.87 Stakeholders have raised the objection that FPA should be allowed only to the tune of the variation in the cost of fuel. As per Section 62(4) of the Act, no tariff or any part of tariff may be amended more frequently than once in any Financial Year, except in respect of any change expressly permitted under the terms of any Fuel surcharge formula as may be specified.

#### **Petitioner's Views**

- 2.88 The Petitioner has submitted that the present methodology of a year-end True-Up of entire Power Purchase Cost (including Transmission Cost) for variations from the estimated costs approved by the Commission prior to the commencement of relevant year(s), results in deferring recovery of legitimate costs for which payments are required to be made immediately by the Distribution Licensees in Delhi. Such deferral, especially in the current regime where there is significant lag between the True-Up based on actual expenditure and the originally approved Power Purchase Costs estimates, together with the large volatility in power purchase prices, contributed by amongst other factors, significant change in Fuel (Coal/ Gas) Prices, unprecedented increase in demand together with Petitioner's efforts to ensure uninterrupted power supply thereby requiring purchase of significant quantities of expensive short term/ bilateral power, reduction in actual allocation of cheaper long term power by the GoNCTD vis-à-vis allocation budgeted by the Commission, etc., results, at times, in large variances from approved estimates; which being of Uncontrollable nature, need to be trued-up through an appropriate mechanism. Further such deferral also creates liquidity crisis and results in higher tariff payment by new consumers for past revenue gaps.
- 2.89 The Petitioner also pointed out that such deferrals results into allowance of interest cost (carrying cost), as the same is required to be funded through loans, resulting into additional burden and ultimately higher tariff for the consumers. A year-end True-Up, especially when the amounts become very large, is not in interest of the consumer who is suddenly forced to pay for his own or someone else's past period consumption thereby unduly burdening him with previous period costs', which, if had been passed on periodically in the year of consumption to the consumer by way of an automatic Power Purchase Price Adjustment (PPPA) mechanism, would not have burdened him inordinately at the end of the year and would have also sent correct and timely economic signals of actual prevailing cost of power Purchase Price Adjustment mechanism, to true up previous quarter's variance, would result in consumers becoming more vigilant and conscious with respect to their consumption, knowing very well that the impact of high cost power purchase would be felt immediately in



the subsequent quarter. It shall also help in passing the benefits of lower power purchase costs vis-à-vis base estimates to consumers within the relevant year itself.

- 2.90 The Petitioner has further stated that while the Generating Stations pass the entire variation in their fuel costs on to the Distribution licensees, from the base price as billed to them by the Fuel (Coal/ Gas) Suppliers on monthly basis, a similar pass through mechanism is not available to Delhi Distribution licensees.
- 2.91 The Petitioner has submitted that the prevailing regulatory framework across various states in the country highlights a scenario wherein the utilities engaged in the distribution of power recover their power purchase costs (including any variations on account of fluctuations at the end of the generating companies) through the retail tariffs so that the future consumers are not burdened with the past revenue gap. However such regulatory measures have not yet been adopted in the NCT of Delhi. The Central Electricity Regulatory Commission (terms and conditions of tariff) Regulations, 2004 provide for "Adjustment of rate of energy charge (REC) on account of variation in price or heat value of fuels." Further, 10 State Electricity Regulatory Commissions have also framed regulations to recover the variation in power purchase cost through retail tariffs.

# **Commission's View**

- 2.92 The power purchase cost accounts for about 80% of Annual Revenue Requirement of the distribution licensees and includes the cost paid for procurement of power, transmission charges, UI charges, SLDC/ RLDC charges and is netted off with revenue earned from sale of surplus power.
- 2.93 The cost of long term power being fixed by the Central Electricity Regulatory Commission (CERC) for plants supplying power to more than one State and by the Delhi Electricity Regulatory Commission (DERC) for plants located within the NCT of Delhi and supplying only to distribution utilities in Delhi. The charges for unscheduled interchanges and Inter State transmission charges including RLDC charges are being fixed by the CERC. The purchase/ sale of intra state power and intra state transmission charges are fixed by the DERC. The short term purchases/ sale are through traders, bilateral contracts, banking, and power exchanges at market determined prices.
- Thus, the power purchase costs are uncontrollable in nature and inter alia, dependent 2.94 upon price of fuel (coal /gas) which are highly unpredictable; availability of power from new sources; demand supply gap of the power within the country etc.
- 2.95 Legally, the provisions of various Acts, viz. Section 28(8) of Delhi Electricity Reforms Act, 2000; Section 62(4) of Electricity Act, 2003; Regulations viz., Clause 27 (15) of the DERC (Conduct of Business), Regulations, 2001; and Clause-5.3(h)(4) & Clause 8.2.1 of the Tariff Policy empowers the Commission to devise, adopt and implement a power purchase/ fuel price adjustment mechanism.
- 2.96 BRPL, BYPL and NDPL have filed separate petitions for Power Purchase Cost Adjustment Mechanism in June, 2010. The Commission has admitted these petitions by separate orders in each of the petitions dated 11.10.2010. The Commission held



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the Public Hearing on 04.08.2011 in the matter; and separate order is being issued in this matter.

# **Time of Day Metering**

## Stakeholder's View

- 2.97 Some of the stakeholders submitted that the Time of Day (ToD) metering should be introduced in the interest of consumers only after due deliberations with consumers and Distribution licensees. They further requested for more clarification on this scheme.
- 2.98 Some stakeholders submitted that the proposal should be optional and a consumer awareness program on the same should be conducted to educate the consumers on the benefits of ToD metering.
- 2.99 Most of the industrial stakeholders (small-scale industries) objected to ToD metering as they felt that it is not very easy to shift their industrial activities to off peak hours because of immobility of their other resources like labour etc.

#### **Petitioner's Submission**

- 2.100 The Petitioner has submitted that the concept of time-differentiated tariff aims at shifting time of peak demand, thereby flattening the load curve for which the Utility provides incentives to shift consumption to off-peak hours and dis-incentives for consumption during peak hours. The concern is how to encourage shifting of energy consumption from peak hours to non-peak hours to reduce the marginal cost of power required for meeting the peak demand. ToD Tariff as a concept is quite beneficial for the stakeholders.
- 2.101 In view of the above, the Petitioner in its ARR Petition proposed to the Hon'ble Commission for introduction of ToD tariff for consumers with load > 10 kW (essentially three phase supply consumers), although few in number as compared to the total consumer base, but contribute significantly to the peak load energy requirement when the marginal costs of power purchase is very high. It needs to be appreciated that demand side management has to be a combined effort of all stakeholders.
- 2.102 The Petitioner has also submitted that determination of electricity tariff to be charged from a category of consumer is the prerogative of the Hon'ble Commission.

# **Commission's View**

2.103 The Commission acknowledges that Time of Day (ToD) tariff is an important Demand Side Management (DSM) measure for incentivizing consumers to shift a portion of their loads from peak time to off-peak time, thereby improving the system load factor. TOD tariffs send price signals to consumers that reflect the underlying cost of generating, transmitting and supplying electricity, and thus enable resources to be allocated more judiciously and efficiently. Further, price-based demand response



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can reduce or shape consumer demand particularly to reduce load at peak hours on the electricity system. Hence, ToD tariff assumes importance in the context of propagating and implementing DSM and achieving energy efficiency.

- 2.104 The Commission has analyzed the load profile data submitted by the Distribution licensees and has the following observations:
  - (a) Distribution licensees have not captured the hourly load consumption profile of various consumer categories. They are directed to collect the monthly data with respect to all consumer categories for a proper analysis before implementation of ToD tariff.
  - (b) Distribution licensees have not submitted any analysis on the impact of imposition of ToD tariff in their ARR petition with respect to various consumer categories. They are directed to put forward the detailed proposal for imposition of ToD tariff along with the likely impact of load shifting on the demand curve.
  - (c) Distribution licensees are directed to furnish information on the status of ToD compliance of the meters installed for various consumer categories.
- 2.105 In view of the observations made above, the Commission has decided not to impose ToD tariff in this Order. However, all possible efforts will be made to ensure that ToD tariff is operational from the coming Financial Year.

# **Cross - Subsidy**

# **Stakeholder's View**

2.106 Some of the stakeholders objected to cross subsidization of one category of consumers by another category of consumers. It was also submitted that cross subsidization in the tariff structure should reduce progressively and the supply of subsidized power to the agricultural and economically weaker sections of the domestic consumers needs to be continued for some more time.

# **Petitioner's Submission**

- 2.107 The Petitioner stated that tariffs are fixed by the Commission taking various factors into account including Cross subsidy, etc.
- 2.108 The Petitioner has further stated that the tariff structure presently applicable in Delhi comprises of the cross subsidy component wherein one category of consumer is subsidizing another category of consumers which results in skewed tariffs being charged to different category of consumers. Though the tariffs should ideally be reflective of Cost of Supply at different voltages but due to the Cross subsidy component, tariffs being charged are skewed for different category of consumers.
- 2.109 The Commission in its MYT Order dated 23.02.2008 has mentioned that ideally electricity tariffs for all consumers should be on cost to serve basis and any subsidy



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based on socio-economic factors or otherwise should be extended by the State Government which should bear the expenses for supporting the weaker sections of society and this responsibility should not be thrust upon other section of consumers.

- 2.110 The Petitioner has pointed that in accordance with the EA 2003 and the policies notified by the Govt. of India from time to time, the Commission is attempting to reduce the prevailing cross subsidy by increasing the tariff for subsidized categories in higher proportion as compared to subsidizing categories, so that the differential between the tariff for subsided and subsidizing categories is reduced. Such reduction in cross subsidy amongst different categories may be also addressed by merging of different categories and or reduction of slabs.
- 2.111 Further, in terms of the Section 61 (g) of the Act, the Appropriate Commission shall be guided by the objective that the tariff progressively reflects the efficient and prudent cost of supply of electricity. In case any subsidy is to be given to a particular consumer category/ class of consumer, such subsidy should be in the form of direct subsidy by the state Govt. (rather than cross subsidization) as per provision of 65 of Act. The National Electricity Policy (NEP) and National Tariff Policy (NTP) notified in terms of Section 3 of Electricity Act, 2003 advocates progressive reduction of cross subsidy across various categories / group of consumers except in the case of consumers below the poverty line where certain conditions have been prescribed.

# **Commission's View**

- 2.112 Regarding cross-subsidy, Clause 8.3 of Tariff Policy states "Direct subsidy is a better way to support the poorer categories of consumers than the mechanism of cross subsidizing the tariff across the board. Subsidies should be targeted effectively and in a transparent manner. As a substitute to cross subsidies, the State Government has the option of raising resources through mechanism of electricity duty and giving that subsidy to only needy consumers. This is a better way of targeting subsidies effectively".
- 2.113 In line with the above provision of the Tariff Policy, Clause 9.1 of the Commission's Distribution Tariff Regulations, 2007 states that any consumer desirous of getting subsidized tariff should approach the State Government and if the request for subsidy is found justified, the State Government may give subsidy to that class of consumers so that these consumers get electricity at concessional tariff.
- 2.114 At present, there are a number of consumer classes such as some slabs of domestic consumers, agriculture, mushroom farming, Government Schools/Colleges/Hospitals etc. which are being cross-subsidized by other consumers. In public responses received on the tariff petitions of the Distribution licensees and otherwise, a substantial section of the public has been raising objections to this cross-subsidization. They argue that after privatisation of distribution of electricity in Delhi, the distribution is a purely commercial operation and there is no justification for making some consumers pay for others and that if any class of consumer is to be given concessional tariff on socio- economic or for any other reason, it is the State Government which should bear the expenditure as supporting weaker sections of society is one of the main responsibilities of Government. It is claimed that this responsibility cannot be thrust upon other sections of consumers.



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

# Billing based on kVAh for Industrial and Non Domestic Consumers with MDI greater than 10 KW

## Stakeholder's View

- 2.116 Most of the stakeholders submitted that kVAh billing should not be adopted for domestic customers, rather should be adopted for Non-Domestic and Industrial customers with a sanctioned load of 10 kW or less.
- 2.117 In cases where MDI has recorded a load greater than 10 kW during any 3 billing cycles in the past 12 months. A few of the stakeholders suggested that instead of considering any 3 billing cycles for evaluation, the Distribution licensees should consider 3 consecutive billing cycles, as that would be a more appropriate measure of checking whether actual consumption exceeds the sanctioned load.

#### **Petitioner's Submission**

- 2.118 The Petitioner has submitted that as per the present tariff structure, kVAh billing is applicable for non-domestic and Industrial Consumers having load more than 10 KW. Further, fixed/demand charges are to be levied on sanctioned load or MDI reading, whichever is higher, on per kW or part thereof basis. Where the MDI reading exceeds sanctioned load, a surcharge of 30% shall be levied on the fixed/demand charges corresponding to excess demand in kW for such billing cycle only.
- 2.119 The Supply Code and Performance Standard Regulations, 2007 prescribe that normally loads up to 10 KW are to be serviced through single phase supply only. However, there are some old consumers with poly phase meters (these meters have built in provision for kVAH reading) and sanctioned load below 10 kW. There are several instances where the MDI of such consumers recorded more than 10 kW. The Petitioner had encouraged such consumers to enhance their load commensurate with their usage. While the Petitioner's Amnesty Scheme did receive some response from such consumers, but there exist consumers who continue to draw load more than 10 kW (as recorded by the meter) even when the sanctioned load is less than 10 kW. This would be at the expense of honest paying consumers who had declared their load diligently. Moreover this also have an adverse impact on Petitioner's distribution system.
- 2.120 In view of the above, the Petitioner in its ARR proposed that where MDI recorded has crossed 10 kW continuously for three billing cycles or more, inferring that their load usage is more than 10 kW, the billing may be done on kVAH (as in the case of loads > 10 kW) however in case the consumer reduces the load to less than 10 kW for three consecutive billing cycles (as per recorded MDI) the billing to be reverted to kWh.



- 2.121 The Petitioner has responded that kVAh tariff encourages consumers to improve their power factor & use electricity in an efficient manner. A higher power factor eventually helps the system by lesser loading and reduction in losses. Accordingly, we have also suggested KVAh billing only for industrial & commercial consumers with MDI greater than 10KW.
- 2.122 In view of the above benefits the Petitioner in this ARR Petition has proposed introduction of kVAh billing for industrial and non-domestic consumers with MDI greater than 10 kW, since it encourages consumers to improve their power factor, which eventually helps the system by less loading and reduction in losses.

#### **Commission's View**

- 2.123 The Commission is aware that all the industrial and non domestic consumers having sanctioned load of more than 10kw are already billed on kVAh basis. The Commission is of the view that it is not practical for the small consumers with sanctioned load less than 10 KW to install and maintain power factor correction equipments in their premises. Therefore it will not be prudent to prescribe the kVAh tariff for such consumers. Further the Commission has also been allowing the installation of capacitor banks by the utilities based on the requirements so as to improve the power factor.
- 2.124 The enhancement of sanctioned load of the consumers who are using load in excess of their sanctioned load has been allowed by the Commission on the directions of Hon'ble ATE in appeal no. 139 of 2010 and in compliance of Section 47 of the Electricity Act, 2003. Accordingly, DISCOMs have been directed as under:
  - a) "Where energy meters have provision for recording maximum demand, the average of the three highest maximum demand readings recorded by the consumer during the 12 month period from April to March (rounded off to the next higher whole number) would be adopted to revise the sanctioned load. For such consumers, the security deposit would be revised accordingly on the above basis. First such period shall take place during the current FY.
  - b) Where the energy meters of the consumers do not have MDI, the Commission shall evolve appropriate guidelines based on the analysis of data to be submitted by power utilities. The utilities shall provide information regarding the average kWh/kW for the 12 month period April to March of 2009-10 for consumers having meters with maximum demand indication for the above analysis.

# Metering of Distribution licensees' premises and sub-stations

# Stakeholder's View

2.125 Many stakeholders have objected to the fact that the electricity usage by the utilities at their office premises, sub stations remains unmetered. Some of the stakeholders have pointed out that own consumption of Distribution licensees has increased sharply in the period from FY 2001-02 to FY 2011-12 which seems erroneous as the new



additions to staff is not allowed free power and the consumptions of offices is unlikely to increase to such an extent.

## **Petitioner's Submission**

2.126 It was submitted that all office buildings / sub stations of the Petitioner are metered and is being accounted properly. The energy consumed by such offices / sub-stations is taken into account while computing the AT&C loss calculations, as projected in the ARR filings.

#### **Commission's View**

2.127 The Commission is of the view that the electricity consumption in sub-stations and offices of the Distribution licensees should be separately metered and properly accounted for in the accounts of the Distribution licensees and the Commission has already issued directives to the Distribution Licensees for complying with the same. The Commission has also decided to cap the consumption of DISCOMs in FY 2011-12 at the levels prevalent during FY 2010-11. This issue will be appropriately revisited while formulating MYT regulations for the Control Period FY 2012-17 so that norms for consumption by the DISCOMs themselves are prescribed.

# **Theft of Electricity**

# Stakeholder's View

- 2.128 Some of the stakeholders submitted that theft of electricity should be minimised and benefit of the same should be passed on to the consumers. The stakeholders have also pointed out that in a large number of cases; the theft of electricity is with the connivance of the staff of the Distribution licensees.
- 2.129 Some of the stakeholders have also pointed out that Distribution licensees often omit to seal the meter after changing the service lines which further results in theft of electricity. A few of them further suggested that the Commission should specify a protocol for sealing/breaking of seals of meters, so that a consumer is more vigilant on that front.
- 2.130 As per the stakeholders, the Distribution licensees should not be allowed to raise the tariff unless they strictly comply with the provisions for curtailing theft of electricity and keeping track of defaulting consumers to ensure that the penalty collected is realised in time and these factors should not contribute to increase in revenue gap.

# **Petitioner's Submission**

- 2.131 The Petitioner submitted that it has undertaken several measures to reduce electricity theft in its area of supply and to come up to the expectations of the consumers.
- 2.132 The Petitioner submitted that all steps as stipulated under the Electricity Act 2003 and Delhi Electricity Supply Code & Performance Standards Regulations 2007 are duly taken by the Petitioner for handling the cases of theft.



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- 2.133 The Petitioner also submitted that income recovered through theft cases is being considered while determining the ARR by the Commission. Minimising theft of electricity has been one of the most aggressively pursued agenda of the Company & internal objectives are being set and management performance measured and rewarded based on loss reduction. The issue of honest vs. dishonest citizens equally applies to the entire service sector (e.g. water, telephone, railways, road transport, etc.), taxes (e.g. Income tax, Custom and Excise, Sales Tax, VAT, property Tax, etc.). The electricity sector cannot be isolated from this menace.
- 2.134 Given this background control of power theft needs active participation and support from all stake holders including the Govt., the public representatives, Citizens, RWAs and NGOs reinforced with effective legal and enforcement framework

# **Commission's View**

- 2.135 The Commission has considered the entire amount recovered on account of theft as revenue available towards Aggregate Revenue Requirement.
- 2.136 The Commission appreciates the concern of the Petitioner on the issue of the control on the power theft and acknowledge the various steps taken by the Petitioner to reduce theft of electricity. The Petitioner is further advised to take adequate measures for significant reduction in AT&C losses during the remaining period of Control Period. The Commission expects that the Petitioner shall encourage active participation and support of RWAs and NGOs and also take suitable steps to keep their staff in check. Substantial progress in curtailing theft has already been achieved and if these trends are maintained, within a couple of years, Delhi's AT&C Losses will come down to nationally/internationally accepted levels.
- 2.137 As per information available to the Commission, six Special Courts have been established by the Govt. of NCT of Delhi to exclusively deal with electricity theft cases in Delhi.
- 2.138 Further, the Commission has decided to issue a detailed protocol of sealing and opening of meters which will be finalised and issued shortly after issuance of the present Tariff Order.

# **Street Lighting**

#### **Stakeholder's View**

- 2.139 Some of the stakeholders submitted that there is lot of mismanagement of street lighting in Delhi. It has been observed frequently that there is lot of wastage of energy by street lights during day hours; whereas, many street lights remain out of order for prolonged duration.
- 2.140 A few of the stakeholders also raised concerns on the billing of street lights, as they have observed that the energy consumed by street lights do not get billed properly.



#### **Petitioner's Submission**

- 2.141 The Petitioner submitted that street lights in Delhi are owned by road owning agencies like MCD, PWD, DDA etc and these are maintained by the Petitioner on behalf of the road owning agencies for which the Petitioner gets maintenance charges from them as stipulated by the Commission from time to time.
- 2.142 The Petitioner has further submitted that the possibility of using alternate method of cost-effective power source for maintenance is being explored. Moreover as the present system of switching of the streetlights is manual there is a time lag in the on/off operation across stretches covered in a beat. Avenues for automated switching of streetlights are being explored. Such pilot projects in Vasant Kunj and Hauz Khas have been implemented and another is under implementation in Janakpuri. Till date a total of 1200 nos of controllers are installed by the Petitioner against 2481 metering locations of MCD Street Lights. As regards street lights switched on during day time, the stakeholder is requested to bring to our notice any specific instance through Distribution licensee's helpline so that the same could be attended promptly.

#### **Commission's View**

- 2.143 The Commission directs the Petitioners to rectify the faulty Street lights without delay and ensure that in future there is no wastage of energy on account of street lights remaining on during the day.
- 2.144 Testing of Street lights during day time need not necessarily be done by switching on sections of street lights. The Commission is of the view that the defective street lights could be checked with power kits available in the inspection van instead of energizing the entire street lights on a particular stretch.
- 2.145 Further the Commission directs the Petitioner to install controllers on all the metering locations on MCD Street lights within 6 months and submit compliance report to the Commission. The Commission directs the Distribution licensees to evolve a mechanism for ensuring that the street lights are switched off during the day time.
- 2.146 The Department of Power, GoNCTD has in its Minutes dated 21.06.2011 directed the PWD to transfer all its street lights to respective Distribution licensees by 01.07.2011. The Minutes also includes the modalities in respect of the bilateral agreement to be entered into between PWD and Distribution licensees.
- 2.147 The Minutes inter alia include a direction to the MCD to submit proposal for handing over of the street lights to the Distribution licensees.
- 2.148 It was also decided that the bills shall be raised by the Distribution licensees and determination of reasonability of rates charged by the Distribution licensees in respect of maintenance and other charges shall rest with DTL; and PWD shall make payments accordingly.



# **Competition in Power Distribution Business**

#### **Stakeholder's View**

2.149 Some of the stakeholders submitted that the Commission can consider introduction of more than one distribution company/licensee in the same area so that there is competition between the licensees and the consumer has a choice to opt for any of the distribution licensee.

#### **Petitioner's Submission**

2.150 The Petitioner has responded that competition has already been introduced in the sector, all consumers above 1MW free to choose their supplier.

#### **Commission's View**

- 2.151 The Commission has notified the Terms and Conditions for Open Access Regulations, 2005 on 3 January, 2006.
- 2.152 The Open access to the intra-state transmission system in the state is already available at present. The open access to the distribution system in the State shall be allowed in the Distribution system subject of absence of operational constraints for which the Commission has allowed from 1 July 2008 onwards the delivery of electricity for use by the consumers with the connected load of 1 MW and above. Further, as per the Regulations" *The Commission may allow Open Access to consumers with capacity requirements less than one MW after 1 July 2008 subject to review of the operational constraints and other factors.* The Commission has decided to take up such a review this year and explore the possibility of introducing open access to consumers with load below 1 MW during the coming year.
- 2.153 The Commission shall consider the license application, if any, for second Licensee in the same area in accordance with the provisions of the law.

# **Prevention of faults**

#### Stakeholder's View

- 2.154 Some of the stakeholders pointed out that the Distribution licensees should take preventive measures for maintaining the system and reduce faults, rather than waiting for the system to get damaged altogether. A few stakeholders also mentioned an instance where because of improper preventive maintenance; oil from a transformer was stolen resulting in overheating and burning of the transformer lines etc.
- 2.155 The stakeholders have suggested that a policy should be formulated to prevent faults rather than removal of faults. This will reduce the O&M expenses which in turn will result in lesser breakdowns and uninterrupted power supply.



#### **Petitioner's Submission**

2.156 The Petitioner submitted that it follows an annual maintenance schedule & preventive maintenance of the distribution equipments is done as per that schedule. Some of the faults are due to overloading / asset abuse in certain pockets due to theft. Based on the analysis, schemes are formulated for undertaking projects on reduction in faults & for improvement of system reliability and once the same are duly approved by Commission, these schemes are executed.

#### **Commission's View**

2.157 The Commission directs the Distribution licensees to carry out the annual and preventive maintenance as per the schedule. The DISCOM shall submit information on the maintenance undertaken as per the schedule and the amount expended on the same on quarterly basis.

# Cheap power to NDMC and resultant lower tariff

#### Stakeholder's View

2.158 During the Public hearing, some of the stakeholders had objected to cheap power being provided to NDMC and the resultant lower tariff.

#### **Petitioner's Submission**

#### 2.159 Not Available

# **Commission's View**

2.160 The Power Purchase cost of all Distribution Utilities including NDMC is a mix of allocations made by the Central/State Governments from various Central / State Generating Stations. The power from various stations as assigned to NDMC has in the past resulted in cheap power to NDMC area and resultant lower tariff. However, it may be mentioned that in FY 2011-12, NDMC has a substantial allocation from the new costlier gas power plant at Bawana which is likely to increase the power purchase cost for NDMC.

# Payment of Bills through Cash

# Stakeholder's View

2.161 A large number of stakeholders have objected to the proposal of enhancing the cash limit for the payment of energy bills from Rs 4,000 to Rs 20,000 as they feel that such a step would encourage money laundering to a great extent.

# **Petitioner's Submission**

2.162 The Petitioner has stated that acknowledging the practical difficulties faced by the consumers who are blind, consumers from outer Delhi/rural areas who wish to deposit



in cash only and in many cases the consumers claiming not to have a bank account, the Petitioner in the present ARR Petition requested the Commission to review its direction and enhance the cash limit to Rs 20000/-

2.163 The Petitioner has submitted that the Commission may like to decide on the same and accordingly allow the additional expenses to be incurred towards handling charges, insurance and other related expenses for the same.

## **Commission's View**

2.164 With respect to payment of bills more than Rs 4000 through cheque, the Commission has taken a conscious decision that in case the bill for consumption of electricity is more than Rs. 4,000, payment for the bill shall only be accepted by the Petitioner by means of an Account Payee cheque/DD. The Commission has, however, in its Tariff Order for FY 2009-10 directed the Petitioner to accept the cash payment of more than Rs 4000 for payment of electricity bill by the visually impaired consumers. The same will continue.

# Uniform fixed charges upto sanctioned load of 5 kW

# Stakeholder's View

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

# **Petitioner's Submission**

- 2.166 In response to the same, the Petitioner has submitted that the Licensee's fixed charges incurred per consumer per month are much more than present charges, causing other domestic consumers of sanctioned load above 5.0 kW and consumers of other categories to cross-subsidize the consumers of sanctioned load lower than 5.0 kW.
- 2.167 This gives undue advantage to consumers, who have not increased their sanctioned load to the actual requirement. To avoid this, it has been proposed to restructure the fixed charges for the Domestic category so that uniform fixed charges are levied up to 5 kW load.
- 2.168 The Petitioner has further stated that for all categories other than Domestic, Fixed/ Demand charges are levied on sanctioned load or MDI reading, whichever is higher, on per kW or part thereof basis. Where the MDI reading exceeds sanctioned load, a surcharge of 30% is levied on the fixed/ demand charges corresponding to excess demand in kW for such billing cycle only.
- 2.169 Further it has informed that when a consumer is connected to the system, the distribution utility has to provide/allocate certain capacity of the distribution system to



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serve the consumer. In addition to this, some expenses such as meter reading, billing, bill delivery, maintenance etc. are fixed in nature and independent of energy consumption. Ideally, the fixed charges levied on the consumer should defray the cost of such capacity requirements of the consumer after considering the fixed cost of such system and diversity of load in the system. Section 45 (3) of Electricity Act, 2003 also provides for the levy of fixed charges.

- 2.170 Although alteration of fixed charges in the present Tariff Schedule is a prerogative of the Hon'ble Commission, the Hon'ble Commission in its previous Tariff Orders had viewed that "with the existing tariff structure, the recovery from fixed charges is very nominal as compared to the fixed costs of the Licensees".
- 2.171 It may also be noted that if the fixed charges are removed, the energy charge would increase as the loss in revenue that was being earned by the Licensee by way of fixed charges would have to be compensated for by increasing the energy charge. Therefore, whether only energy charge is levied or energy charge as well as fixed charge is levied, the same ARR would have to be recovered from the consumers.

# **Commission's View**

- 2.172 The Commission fixes the tariff keeping in view the provision of the Tariff Policy regarding gradual reduction in the cross subsidies. The Commission feels that the proposal to levy uniform charges up to sanctioned load of 5 kW will burden the low end consumers falling within the tariff category of up to 2 KW.
- 2.173 In view of the above, the Commission decides to continue with the existing system of levying fixed charges.

# Applicability of tariff with load >100 kW for residential users

# **Stakeholder's View**

2.174 The stakeholders disagree with the proposal put forth by the Distribution licensees that a different treatment of tariff for individuals with load above 100kW for residential use should be introduced. The stakeholders have opined that such a proposal should be rejected for the sole reason that introducing a different rate for the same class of domestic consumer is without any rationale.

# **Petitioner's Submission**

2.175 The Petitioners have stated that in case of individual consumer having load above 100 KW for residential use (most of it due to substantial cooling/heating load) the treatment in terms of Tariff is expected to be different like it is for other categories e.g. Non- Domestic, Industrial etc. where consumers with load > 100 kW are treated separately. However, the final decision rests with the Hon'ble Commission.



#### **Commission's view**

2.176 The Commission feels that applicability of differential tariff for load higher than 100KW for residential consumers cannot be done in isolation without knowledge of load profile vis-à-vis the type of consumers falling under the load profile, the number of consumers, their present impact on tariff, justification of their separate treatment etc. The Commission shall consider this proposal based on the detailed submission of the Distribution licensees. The Commission is also in the process of amending the Supply Code Regulations and any change in category, if introduced, shall become applicable. Till then the Commission decides to continue with the existing terms and conditions of tariff for this category.

# **Special Treatment for Govt. aided schools/institutions**

#### Stakeholder's View

2.177 A few of the stakeholders, who were representatives of GoNCTD aided schools have stated that these schools are recognized and aided by GoNCTD and therefore does not fall under the definition specified by DERC in it supply code (as given below); *"Dispensaries, hospitals, public libraries, schools, working women's hostel, orphanages, and charitable homes run by MCD or GoNCTD. Above establishments can only be given domestic connection"*. Therefore, at present, non-domestic tariff is applicable to these schools, as it is not directly run by MCD/GoNCTD. The stakeholders have requested to allow domestic tariff to be charged for such schools which are aided by GoNCTD.

#### **Petitioner's Submission**

2.178 The Petitioner has submitted that the fixation of tariff is the sole prerogative of the Commission and the Commission may like to decide accordingly.

#### **Commission's view**

2.179 Regarding domestic tariff for educational institutions and Basti Vikas Kendra etc. run by NGOs on land given by MCD/ GoNCTD, the Commission is of the view that extending any further concession would be a retrograde step and will increase the cross subsidy element. It would be ideal to fix electricity tariff for all consumers on cost to serve basis and any subsidy based on socio-economic factors or otherwise should be extended by the State Govt. The Commission also feels that the State Govt. should bear the expenses for supporting the weaker sections of society and this responsibility should not be thrust upon another section of consumers.

# **Reduction in number of slabs for Domestic category**

# **Stakeholder's View**

2.180 NDPL in its Tariff petition has proposed reduction in the slabs for domestic category to simplify the tariff structure and also to reflect the true cost of service. The suggested slabs are 0-200 units per month and above 200 units per month.



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2.181 The stakeholders have opposed the Distribution licensee's proposal of reducing the number of slabs for the domestic category of consumers and suggested only two slabs, viz. 0-200 units per month and above 200 units per month. The stakeholders feel that the reduction in number slabs will only result in additional burden on the consumer and undue benefit to the supplier. The stakeholders have also stated that this will result in clubbing the middle class people with the richer section of people, thus penalising the poor.

#### **Petitioner's Submission**

- 2.182 The Petitioner has submitted that it has proposed reduction in the number of slabs so as to further simplify the tariff structure and to also reflect the true cost of service. This shall ensure that the cross-subsidy, presently being provided by Industrial/ commercial consumers, is further reduced. Charging higher tariffs for consumption in higher slabs would be in line with the economic rationale of recovery of cost to serve, cost reflective tariffs, charging higher tariffs for high end consumption, power being procured in a scarcity condition at very high cost.
- 2.183 The Petitioner has further submitted that the fixation of tariff is the sole prerogative of the Commission and the Commission may like to decide accordingly.

# Commission's view

- 2.184 The Commission fixes the tariff keeping in view the provision of the Tariff Policy regarding gradual reduction in the cross subsidies. The Commission feels that the suggestion to reduce the number of slabs shall result in increase in the rate per unit of electricity consumed by the low end consumers of Domestic category.
- 2.185 In view of the above, the Commission decides to presently continue with the existing slabs.

# **Response of DTL on ARR petition filed by Distribution licensees**

# Stakeholder's View

2.186 DTL has submitted that BRPL, BYPL, NDPL and NDMC have not claimed the power purchase cost in their respective tariff petition pertaining to the additional power purchase bills received by DTL for the period prior to 1<sup>st</sup> April, 2007 from various generating companies due to revised Orders issued by CERC. Even the Commission has allowed Rs 117.95 Cr in the Tariff Order for FY 2009-10 but the distribution companies have not made any payment in this regard.

# **Petitioner's Submission**

2.187 BRPL and BYPL have submitted that they will pay the dues after the notification of ARR and Tariff Order for FY 2011-12. In addition, BRPL has also stated that it will cause recovery of the amount through revised tariff from regular consumer's bills and shall remit the amount upon recovery from consumers to DTL.



2.188 NDPL has submitted that this claim has been filed separately with DERC.

## **Commission's View**

- 2.189 The Commission has already approved power purchase cost of Rs 117.95 Cr in its Tariff Order of FY 2009-10 dated 28<sup>th</sup> May, 2009 and had also directed the Distribution Licensees to pay the amount on provisional basis vide the said Order.
- 2.190 However, the Distribution licensees have not made any payment in this regard. The Commission is of the view that DTL is entitled to carrying cost on the amount up to the date when DTL has raised invoice on the Distribution licensees. The Commission has, therefore allowed the amount of carrying cost so calculated in the ARR of DTL for FY 2011-12. The payment of billed amount along with interest on the delayed payment from the date of Invoice till date of payment is the responsibility of the Distribution licensees. Any interest on the delayed payment (which is penal in nature) paid by the Distribution Licensees in accordance with the commercial agreement with DTL shall not be a pass through in the ARR of the Distribution Licensee. The Distribution licenses cannot claim any penal interest as a pass through in their ARR since it was their duty to make payment to DTL on time.

# Payment to DPCL on account of prior period liability

# Stakeholder's View

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

# **Petitioner's Submission**

- 2.192 NDPL has submitted that the said claim is not in line with interpretation of transfer scheme. Even, the judgment of Hon'ble Supreme Court was in respect of different facts and circumstances and is not applicable to payments already made by DPCL to any parties/contractors etc. The payment as mentioned in here, if disbursed, were done so treating them as valid and due by DPCL, under the provisions of transfer scheme. The judgment cannot have retrospective operation on those payments which were undisputed and hence paid by DPCL in capacity of holding company.
- 2.193 As per BRPL's submission, the judgment of the Hon'ble Supreme Court was in respect of different facts and circumstances and is not applicable to payments already made by DPCL to any parties/contractors etc. The payments mentioned here if disbursed were done so treating them as valid and due by DPCL under provisions of transfer scheme. The judgment cannot have retrospective operation on those payments which were undisputed and hence paid by DPCL in the capacity of holding company.
- 2.194 BYPL submitted that it has, on the basis of the Hon'ble Supreme Court judgment, received claims amounting to Rs 0.90 crores from erstwhile DESU employees till date



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and the same has been claimed in the Present Petition (Refer page No. 74 of BYPL's Petition)

## **Commission's View**

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

# **Payment to Pension Trust**

#### **Stakeholder's View**

2.196 Stakeholders have claimed that the successor entities of the erstwhile DVB are liable to make payment to the Pension Fund on account of 1) Actuarial Revaluation of the Fund (total amount to be paid – Rs 1315 Cr). 2) Reimbursement of actual payment to the retirees by the fund on account of medical reimbursement, LTC from 2002-11 and Pension Arrears paid on account of Sixth Pay Commission recommendations. (Total amount to be paid till FY11 – Rs 245 Cr, Projected payout during FY12 – Rs 267 Cr). The details for which are shown in the tables below:

#### Table 6: Additional Contribution to the fund

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

Terminal Benefits as on 28.2.11	DTL	IPGCL	BRPL	BYPL	NDPL	Total
Amount Claimed by Trust for FY11*	16.84	21.84	79.68	65.27	61.85	245.48
Amount Claimed by Trust for FY12*	24.28	32.35	80.95	66.31	62.84	266.73
Claimed in Petition for FY11**	26.98	32.18	0	0	0	0
Claimed in Petition for FY12**	50	32.35	0	0	0	0

#### Table 7: Terminal benefits as on 28.02.2011

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

2.197 Two of the utilities DTL and IPGCL have claimed additional amount on account of payment to Pension Trust for medical, LTC and Pension arrears. The Distribution licensees have however not staked any claim in this regard.

# **Petitioner's Submission**

2.198 As submitted by BRPL and NDPL, "The issue in regard to determination of liability is sub-judice. The Hon'ble high court had directed in the year 2007 for formation of an Arbitral Tribunal to work out the liabilities of Distribution licensees, GNCTD based on actuarial principles. In terms of the said judgment and clarificatory orders which followed, the Distribution licensees as well as Institute of Actuaries had appointed their joint nominee to the said Arbitral Tribunal in 2008 itself, however the Pension trust refrained from appointing their nominee to the



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Arbitral Tribunal, due to which Arbitral Tribunal was not constituted and the liabilities, savings or additional contributions if any of Distribution licensees, Pension trust could not be worked out. At present also the Pension Trust has to appoint their nominee to the proposed Arbitral Tribunal and we have sent appropriate intimation drawing their attention to the same in compliance of Hon'ble High Court directions. Further the Pension trust had furnished some documents/ reports last year, raising demands based on actuarial valuations of benefits/liabilities of employees, retirees as on 01.07.2002 and 01.04.2007, to which we had submitted our detailed responses and reservations. Thus, actuarial valuation is required to work out the complex issues involved."

2.199 As submitted by BYPL, "In this connection you are hereby informed that BYPL has not claimed any amount towards the reimbursement of the payments to the retired employees of erstwhile DVB on account of medical, LTC, leave encashment and pay arrears etc., in ARR for the Financial Year 2011-12. The contention raised by the Pension Trust is already under dispute and is being separately taken up with GoNCTD and Pension Trust. Moreover the issue of under funding of the Pension Trust corpus is already sub-judice before the Hon'ble High Court in the civil writ petition no.1698/2010 filed by Delhi State Electricity Union Vs GoNCTD & Others in which the said Union has not made DISTRIBUTION LICENSEES as necessary party. They have made GoNCTD & Pension Trust as the only party. Needless to mention here that in spite of vigorous pursuance by BYPL, the Pension Trust has so far, till date not forwarded any audited statement of accounts. In any case, if the Hon'ble Commission intends to allow such claims of the Pension Trust towards the reimbursement of claims of the retired employees of the erstwhile DVB, this will be over and above of expenditure incurred and claimed in the ARR Petition for the Financial Year 2011-12 for which DERC has to pass the Tariff Order which is still under finalization and yet to be published."

# **Commission's View**

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



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2.203 The Commission further directs DTL to transfer this amount of Rs 150 Cr to the Pension Trust and also maintain a separate record of payment made to Pension Trust.

# **Cooperative Group Housing Societies (CGHS)**

#### Stakeholder's View

- 2.204 It has been submitted that levy of fixed charges is unjustified in case of Domestic 11 kV CGHS SPD connection where the initial capital cost for the entire system including transformers etc is provided by CGHS and the system is being maintained by CGHS/RWAs at their cost only. Also most of these societies are connected to a single point delivery system and the HT/LT power equipment has been procured and installed by the societies themselves. The stakeholders have further submitted that no fixed charges should be charged from CGHS as is not being charged from MCD for street lighting.
- 2.205 Some stakeholders residing in CGHS highlighted that they have not been given the 15% rebate that is allowable to consumers living in these societies as per the tariff schedule. Some others have recommended that this rebate should be increased to 30%.
- 2.206 Another stakeholder has also pointed out that the current energy charges for the societies do not help in energy conservation therefore, the prevalent energy charges for societies should be revised from Rs 2.45 for 44.4%, plus Rs 3.95 for next 44.4% plus Rs 4.95 for balance 11.2% to Rs 2.45 for first 200 units multiplied by the number of flats units plus Rs 3.95 for next 200 units multiplied by number of flat units and Rs 4.95 for the balance units.

# **Petitioner's Submission**

- 2.207 The Petitioner submitted that the determination of tariff to be charged from the consumer is the prerogative of the Commission, in terms of the provisions of Electricity Act, 2003. The Commission has clearly explained the rationale for determining the tariff for CGHS consumers in its earlier Tariff Orders.
- 2.208 With regard to fixed charges, the Petitioner submitted that as per EA 2003, the charges for electricity being supplied by a distribution licensee may include a fixed charge in addition to the charge for the actual electricity supplied. The said fixed charges are to cover a component of fixed cost incurred by the DISCOM to maintain the distribution network / infrastructure to meet the load requirements of the consumers.
- 2.209 As regards the enhancement of rebate allowable to CGHS, the Petitioner submitted that tariff fixation is the sole prerogative of the Hon'ble Commission and the matter may be looked into by the Hon'ble Commission such that all legitimate costs including returns, etc, as per the MYT Regulations are recovered through tariff.



#### **Commission's View**

- 2.210 The Commission has considered the Stakeholder's views on behalf of the Cooperative Group Housing Societies regarding common service of CGHS which are being charged at the highest level of domestic tariff and levy of fixed charges in case of domestic 11 KV CGHS SPD connections and response of the Petitioner on the above mentioned issues. The Commission is of the view that the infrastructure above 11KV for supplying power at 11kv has to be created by the Distribution licensees. Therefore fixed charges which are very nominal are being charged.
- 2.211 The Commission is of the opinion that charging at highest slab of domestic tariff for common services of CGHS is justified because these charges are for extra consumption pertaining to the residents of the societies and hence would fall under the highest slab. It may therefore, be continued to be charged as per the present practice.

# **Delhi Metro Rail Corporation (DMRC)**

# Stakeholder's View

- 2.212 DMRC has submitted that it may be continued to be treated as a separate category of consumer whose tariff would be based on the actual cost to serve (at 220 kV or 66 kV) excluding both the subsidy and cross subsidy elements. DMRC tariff has been fixed in the past years based on the principles deliberated and settled after discussions between DMRC, Distribution licensees and the GoNCTD. Also from technical considerations, DMRC needs supply at 66 kV/ 220kV and presently DMRC is taking electricity directly at the inter-connection points of Delhi Transco Limited. The entire distribution network and system beyond the inter-connection points is owned, operated, maintained, serviced, upgraded and utilized exclusively by DMRC, without any intervention to the services rendered by Distribution licensees. The only costs applicable to the Distribution licensees are that of metering and cost of input purchase.
- 2.213 DMRC requested for continuation of the principles adopted in earlier Tariff Orders of the Commission namely that the DMRC's tariff should be based on the cost at which electricity is available to the licensee at the inter-connection points of TRANSCO and it certainly should not include other expenses of Distribution licensees other than the said input cost.
- 2.214 It has been highlighted that DMRC has already been paying the Distribution licensees a tariff which is higher than the 'cost to serve' rates. Also the 'cost to serve' rates indicated by the Distribution licensees already include all charges inclusive of profit overheads etc. Any further hike in tariff will only contribute to increasing the difference between the cost to serve and the tariff charged to DMRC and hence will mean cross subsidizing other consumers.
- 2.215 DMRC further submitted that Tariff cannot be determined based on any paying capacity of the consumer. The tariff has to be determined based on the cost of supply and The Mass Rapid Transit System for Delhi being executed by DMRC is a public utility and a social sector project with very low financial rate of return. Electricity is



the only source of energy for operation of the Metro System. The cost of electricity constitutes a significant part of cost (25%-30%) of total annual working expenditure.

2.216 They also operate freight traffic and get compensated accordingly. The Railways may, therefore, be governed by the principles of progressive reduction of cross-subsidization and movement towards cost of supply.

# **Petitioner's Submission**

2.217 The Petitioner has submitted that the determination of tariff to be charged from the category of consumer is the prerogative of the Commission.

#### Commission's View

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

# **Railways Traction Tariff**

#### Stakeholder's View

- 2.219 Representative of Indian Railway submitted that there should be no increase in Railway Traction Tariff and should be kept at a reasonable rate, as per the recommendations of MoP and Public Accounts Committee of Lok Sabha.. It was submitted that average electricity cost of realization for Railway traction should be brought down to reasonable level by cutting down energy charges and demand charges at par with NTPC/NHPC i.e. central generating units rate of supply.
- 2.220 Further incentives for timely payment shall be given to Northern Railway as such practice will encourage the consumers to make timely payments voluntarily. The stakeholders stated that as per the National Tariff Policy notified by Ministry of Power, Government of India (GoI), the electricity tariff should progressively reflect the cost of supply. It was submitted that there should be no discrimination in tariff between Railway and DMRC. Railways should be charged a tariff lower, if not equal to that applicable to DMRC.
- 2.221 It was also submitted that the tariff for Railways should be linked to cost of supply, while taking into account the fact that it draws power at 66kV where losses are minimal.
- 2.222 It was further stated that the fixed charges being levied for Railways are very high (@Rs 150/kVA) compared to other neighbouring states like Haryana (@Rs 125/kVA) The billing demand should be 65% of the contract demand or recorded demand whichever is higher during the month. Northern Railways should be exempted from payment of penalty charges on over drawl of power which becomes unavoidable in



many situations arising on account of failure of supply from supplying authorities, accidents, and agitations etc which are beyond the control of the Railways.

- 2.223 The stakeholder also stated that additional charges for MDI in excess of contract demand are very high. Given that Railways is unable to control its load at all times, it has been suggested that excess load of upto 10% of Contract Demand be allowed for short durations before application of load violation charges.
- 2.224 It was further stated that the load of traction substation being fairly constant throughout the day and forms the base load of the system, Time Differential Tariffs should not be applied to Railways.
- 2.225 Also, it was pointed out that metering for Railway Traction Sub Station at Narela is being done at GSS of NDPL. It has been requested that metering be done at Railways Traction Sub Station TSS.

#### **Petitioner's Submission**

- 2.226 The Petitioner submitted that the determination of tariff is the sole prerogative of the Commission and they may like to decide on the same.
- 2.227 The Petitioner has submitted that the Billing Demand concept being followed is in line with Delhi Electricity Supply Code and Performance Standards Regulations 2007.
- 2.228 The Petitioner has submitted that Penalty Charged on over-drawal has to be in line with that of other categories of Consumers as per DERC directives and exemption from the same to one category of consumer may result into creating discrimination amongst consumers, which is against the basic tenets of the Electricity Act 2003.
- 2.229 In response to the metering of railway traction, the Petitioner has submitted that the site for installation of 33KV metering equipment has been identified and further action is under process.
- 2.230 The Petitioner has submitted that the stakeholder in this matter had preferred an appeal before the Appellate Tribunal for Electricity. The Appellate Tribunal for Electricity in its judgment dated 13th March 2007 had stated "The purpose of supporting the establishment of DMRC for providing the Mass Rapid Transit System, a crying need for the people of Delhi, is itself one great ground for treating the DMRC as a separate class of consumers. It can, therefore, be safely stated that the purpose of supply of electricity to the DMRC is different from the purpose of supply of electricity to the DMRC is different from the purpose of supply of preferential treatment to DMRC as compared to the appellant".
- 2.231 The Petitioner has stated that the Commission in its Tariff Order dated 26th June 2003 has already dealt with this issue. The Commission in its Order has categorically stated that "The Commission is of the view that the payments of dues for electricity already consumed by the consumer must be prompt and within the due date. As such, to maintain payment discipline, a rebate for timely payment of bills may not be allowed. Allowing rebates not only makes the computations complex but also means effectively



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*lowering the tariff rates*". Therefore, any revision/exemption for any class of consumer in the tariff and related issues is the prerogative of the Hon'ble Commission.

2.232 The Petitioner has stated that the mechanism to amortize the Revenue Gap is the prerogative of Hon'ble Commission.

## **Commission's View**

- 2.233 The Commission acknowledges the critical role played by the Railways in the economic development of the nation.
- 2.234 The Commission has examined the request of the Railways to exempt them from the payment of penalty charges on over drawl considering the unique nature of traction load. In the Tariff Order dated 9 June, 2004, the Commission has specified that whenever the MDI reading exceeds contract demand, a surcharge of 30% shall be levied on the fixed charges corresponding to excess demand for such billing cycle. The Commission would like to point out that such a surcharge is necessary for all consumers as the Utilities have to plan in advance to cater to the load of the consumer, the Utility has to arrange for additional power from costlier sources to meet the demand of the consumer.
- 2.235 Regarding comparison of Railways with DMRC, the Commission states that DMRC cannot be compared with the Railways. The Appellate Tribunal for Electricity in the matter of Northern Railway versus Delhi Electricity Regulatory Commission and others upheld the impugned Order of the Commission, whereby, the Commission treated the DMRC as a distinct special class for the purpose of the tariff. The Commission in the past Tariff Orders recognised DMRC as a social sector utility for the public of Delhi and that its viability is greatly impacted by the price of electricity. The Appellate Tribunal for Electricity further observed that the establishment of DMRC for providing the Mass Rapid Transit System is itself an important ground for treating the DMRC as a separate distinct class of consumers.
- 2.236 The Commission has decided that the metering in case of all the bulk consumers shall be done at the sending end.

# Separate Tariff for Delhi International Airport Limited (DIAL)

#### **Stakeholder's View**

- 2.237 DIAL submitted that it has taken up the modernization of IGI Airport. DIAL has been striving for providing world class infrastructure and amenities at IGI Airport.
- 2.238 The airport being operated, maintained, modernized, restructured and developed by DIAL is an essential infrastructure for the economic development of the whole nation. Thus, DIAL should be continued to be given a 'special consumer status' and accordingly the separate tariff applicable to the them should be retained.



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2.239 Most of the stakeholders submitted that DIAL should not be given preferential status by providing separate tariff category and should be charged at the rate applicable to other non domestic consumers.

#### **Petitioner's Submission**

- 2.240 The Petitioner submitted that the fixation of tariff for different categories is prerogative of the Commission. Therefore, in the materialization of Tariff Proposal or rationalization measures, the Commission has the final say while finalizing tariff for Wheeling of Electricity and Retail Supply.
- 2.241 The Petitioner has further submitted that in case any subsidy is to be given to a particular consumer category/ class of consumer, such subsidy should be in the form of direct subsidy by the state Govt. (rather than cross subsidization) as per provision of 65 of Act. The National Electricity Policy (NEP) and National Tariff Policy (NTP) notified in terms of Section 3 of Electricity Act, 2003 advocates progressive reduction of cross subsidy across various categories / group of consumers except in the case of consumers below the poverty line where certain conditions have been prescribed. The Commission has stated its views in this matter in the previous Tariff Order mentioning therein that aspect of reduction in the cross subsidies will be kept in mind, while determining the category-wise tariffs.

# **Commission's View**

2.242 The Hon'ble ATE in its Order in Appeal No.195 of 2009 in the matter of Mumbai Airports International Limited Vs. MERC and Reliance Infrastructure Limited has also ordered as under:-

"The State Commission could have differential tariff for the aviation as well as for the purely commercial activities, such as shops, restaurant, etc. at the airport. However, if it is not feasible to have separate metering arrangements for the aviation activities and purely commercial activities, then the State Commission could re-categorize the Appellant in a separate category other than HT Commercial II and determine the composite tariff for aviation and the commercial activities of the Appellant."

2.243 The Commission, in the Tariff Order for 2009-10 has already created a separate category to cover the consumption for the infrastructure facilities at the airport. However in view of the fact that DIAL is providing services to consumers belonging to higher strata, it will not be fair to give the tariff at par with DJB, which is providing essential services to all consumers including the lowest strata of the society. Accordingly, the Commission has decided to give DIAL, a tariff, which shall be higher than that of DJB but lower than that of Non Domestic HT consumers.



# Merger of MLHT and NDLT II (Non Domestic) Consumer Categories

#### Stakeholder's View

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

#### **Petitioner's Submission**

2.245 The Petitioner submitted that there is no rationale for charging differential tariff to the Non-Domestic (MLHT, NDLT Consumer categories) as these Consumers use electricity for the same "commercial activity" purpose. This will help in reducing the number of categories and simplifying the tariff structure and to further curb the malpractices. The Petitioner also submitted that the fixation of tariff for different categories is prerogative of the Commission and it may be decided by the Commission.

#### **Commission's View**

2.246 The Commission is of the opinion the NDLT-II and MLHT categories necessarily serve similar category of consumers both of which are commercial in nature. By way of historical categorization into NDLT-II and MLHT categories, these categories are having differential tariff. The Commission now abolishes the above two categories and creates a new NDHT category in place thereof.

# Delhi Jal Board (DJB)

# Stakeholder's View

- 2.247 DJB has requested to fix subsidized/concessional tariff which should be atleast equal to, if not lower than that of DMRC.
- 2.248 DJB has submitted that it is generally connected through dedicated feeder lines and therefore, not affected by the losses in the distribution system and the supply through dedicated lines is clearly measurable both in terms of capacity and units consumed. DJB has stated that their tariff should not exceed the Cost of Supply and should not meet any part of subsidization of any class/category of consumers.
- 2.249 DJB has further pointed out that the existing tariff of DJB is much higher than the industrial tariff, which is not justified. Also, they have requested for a reduction in their contract demand.
- 2.250 Further, as per the policy of the govt, pre-paid meters are to be installed on electricity connections with load up to 45 kW. However, as stated by DJB, these are yet to be installed on a few DJB connections.



2.251 DJB has submitted that the Distribution licensees are supposed to show the print out of consumption of units on these installations at the time of purchase of new coupons, which is not being done currently.

## **Petitioner's Submission**

- 2.252 The Petitioner submitted that the classification of consumers in different category and the determination for the category is the prerogative of the Hon'ble Commission, in terms of the provisions of the Electricity Act 2003.
- 2.253 The Petitioner has further submitted that the provision of supply through dedicated feeder lines is not restricted to the DJB alone and there are several consumers both Government and Private similarly placed with tariffs as applicable to the stakeholder. It is a fact that cross subsidization amongst consumer categories has been in existence due to socio-economic compulsions. The Electricity Act 2003 & National Tariff Policy recognizes this fact and proposes to eliminate cross subsidy over a period of time. There are several other segments of the consumers that also equally serve some social objective or the other. It is for the Hon'ble Commission to weigh the relative claims of such category of consumers in the light of the provisions contained in the Electricity Act 2003 & National Tariff Policy, while revenue realized through the tariff determined for various categories of the consumers meets the Aggregate Revenue Requirement of the Petitioner.
- 2.254 The Petitioner has stated that as per Section 21 of the Delhi Electricity Supply Code and Performance Standards Regulations, 2007, the "*The Application for load reduction shall be accepted only after one year from original energisation for connections up to 100 KW and two years from original energisation for connections above 100 KW. The applicant shall apply for load reduction to the licensee in the format prescribed at ANNEXE-IV to the Regulations or as approved by the Commission from time to time, along with the reasons for load reduction.*" Further, the Regulations prescribe that such Load Reduction shall be limited to a maximum of 50% of the load at the time of original energisation.
- 2.255 The Petitioner has further stated that in terms of Section 61(g) of the Act, the appropriate Commission shall be guided by the objective that the tariff progressively reflects the efficient and prudent cost of supply of electricity. In case any subsidy is to be given to a particular consumer category/class of consumer. Such subsidy should be in the form of direct subsidy by the state govt. (rather than cross subsidization) as per provision of Section 65 of the Act. The National electricity Policy (NEP) and National Tariff Policy (NTP) notified in terms of Section 3 of the Act advocates progressive reduction of cross subsidy across various categories/group of consumers except in the case of consumers below the poverty line where certain conditions have been prescribed. The Commission has stated its views in this matter in the previous Tariff Order mentioning therein that aspect of reduction in the cross subsidies will be kept in kin, while determining the category-wise tariffs.

# **Commission's View**

2.256 The Commission acknowledges the important public utility role performed by DJB. Historically, cross subsidy has been there in the electricity sector since time



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immemorial. The Commission is taking gradual steps to reduce the cross subsidy. Any disputes between DJB and the Distribution licensees need to mutually resolved. If any such dispute falls in the jurisdiction of the Commission, a petition can be filed before the Commission by the aggrieved party and the Commission will settle the matter expeditiously. The Supply Code and Standards of Performance are under revision and DJB's suggestions relating thereto shall be duly considered while finalising the same.

# **Enforcement Practices Adopted by the Petitioner**

#### Stakeholder's View

- 2.257 Some of the stakeholders have submitted that Distribution licensees must refrain from employment of contract employees for meter testing and enforcement activities. Only permanent employees of the Petitioner should be engaged in enforcement activities. It was also alleged that Distribution licensee's staff are harassing the consumers in the name of enforcement and theft prevention activities. The enforcement staff themselves break the seal of the meters and demand graft for not booking for the offence of electricity theft.
- 2.258 A few of the stakeholders have also raised objections regarding levying of misuse charges without giving the consumer an opportunity to be heard to defend his cause.

#### **Petitioner's Submission**

- 2.259 NDPL has submitted that all the enforcement activities are carried in-house, however, for the few outsourced teams in place; it is ensured that they are always accompanied by Distribution licensee's representative at least of Assistant Manager level, to avoid any kind of discrepancy.
- 2.260 BYPL has submitted that it does not outsource the enforcement activity; moreover the Petitioner has its own dedicated team responsible for recovery on account of theft/enforcement. It may be noted the Petitioner follows the procedure as specified in Regulation 52 of the Delhi Electricity Supply Code and Performance Standard Regulations 2007.

#### Commission's View

- 2.261 The Commission has already given direction to the Distribution licensees that the officials / representatives of the Distribution licensees entering in the consumer premises should carry their identity card. The Commission is of the view that the enforcement team must be headed by a regular/permanent employee in accordance with the provisions of the Electricity Act and Delhi Electricity Supply code and Performance Standard Regulations, 2007.
- 2.262 The Commission directs the Distribution licensees to follow the procedure as prescribed in Regulation 52 of Delhi Electricity Supply Code and Performance Standards Regulations, 2007.



# **General Complaints**

- 2.263 It was requested by a section of stakeholders for getting bills (along with instruction/information) printed in Hindi. (1)
- 2.264 A few stakeholders have also suggested for a more comprehensive and abridged form of the ARR petition for the general public. (2)
- 2.265 Some stakeholders suggested that with the change in economic status of the consumers coupled with the economic growth, the tariff slabs of domestic consumer has not changed at all. It was suggested that the applicability of first slab of 0 200 units to be increased to 0 400 units. (3)
- 2.266 Stakeholders have suggested that Grievances Redressal Forums are the establishments of the distribution companies; therefore, consumer redressal is difficult at the hands of the Distribution licensees. The consumers have suggested that there should be effective call centre for receipt of public comments and also for providing guidance on procedure for redressal. (4)
- 2.267 Some stakeholders have also demanded that there should be an inspection on the electricity connection of pan-shops, electric iron presses, local vegetable shops. (5)
- 2.268 Some of the stakeholders have requested for a uniform tariff of Rs 2.45/unit up to 3000 units and @3.95/unit thereafter for temples. (6)
- 2.269 A few of them also insisted on introduction of spot billing system. (7)
- 2.270 Some of the stakeholders suggested that only Loop connection charges should be charged on the second connection within the same premises and not the development charge again, as is the current practice. Further, religious places should be exempted from this development charge altogether. (8)
- 2.271 Most stakeholders have expressed their displeasure with the current situation of purchasing power (on short term basis) at high rates, while selling this power at much lower rates (in terms of bilateral short term sale). (9)
- 2.272 One of the stakeholders pointed out that public utilities like water treatment plant, Sewage Treatment plant, Pumping Stations, MTNL and Telecommunication companies despite being identified as Industries are being charged MLHT (Mixed Load High tension) tariff, which is not justified. (10)
- 2.273 Most of the stakeholders have demanded that the status of the Tariff Order for FY 2010-11 to be made public before issuing the Tariff Order for FY 2011-12. Further, they have expressed their displeasure at the exercise of truing up for FY 2008-09, as a part of the current Tariff Order. They have stated that the results of the True-Up of FY 2008-09 are available in the draft Tariff Order for FY 2010-11 and should be maintained.(11)



- 2.274 The representatives of the Delhi Bar association have suggested that they should be charges at Domestic rates for their Chambers situated within court complexes (12)
- 2.275 The representative of Patparganj Industrial Estate have requested for single point metering in industrial estates.(13)
- 2.276 The consumers have insisted on providing consumer advocates to analyse the Tariff Petitions for the benefit of public and also helping industrial consumers with their complaints.(14)
- 2.277 The consumers have requested for simplification of process of transfer of meters to new owners of property. (15)
- 2.278 Some of the consumers suggested that there should be a protocol for paying consumer bills ensuring adequate time (15 days) for payment. (16)

## **Petitioner's Submission**

- 2.279 The Petitioner (BSES) has submitted that the bills in Hindi can also be provided to consumers. All consumers of the Petitioner are given a choice of getting their bills in Hindi or English. The consumer has to exercise the option through an application at any of our Customer Care Centre. (1)
- 2.280 Not replied (2)
- 2.281 In response to the same, the Petitioner has submitted this shall ensure that the Cross subsidy, presently being provided by Industrial/ Commercial Consumers, is further reduced. Charging higher tariffs for consumption in higher slabs would be in line with the economic rationale of recovery of cost to serve, cost reflective tariffs, charging higher tariffs for high end consumption, power being procured in a scarcity condition at very high cost. (3)
- 2.282 The Petitioner has submitted that the Comment put forth by the consumer is incorrect; since these redressal forums (CGRF, Ombudsman) are statutory bodies created under the mandate of Electricity Act 2003 and have been accorded recognition and sanctity by the Hon'ble Supreme Court of India in various judgments. CGRF and Ombudsman are functioning under the aegis of DERC and update the DERC on performance of Distribution licensees. Apart from this, consumers are free under existing redressal mechanisms, to approach our various Consumer Care Centres, Call Centres, Zonal Complaint Centres and Website etc. for getting their issues addressed.(4)
- 2.283 The Petitioner has submitted that it is providing electricity connections only to the consumers who fulfil the minimum formalities as prescribed by DERC. (5)
- 2.284 The Petitioner has submitted that the fixation of tariff is the sole prerogative of the Commission and the Commission may decide accordingly. (6)
- 2.285 NDPL has already initiated the activity of introduction of spot billing in some identified areas. Based upon the successful outcome of this pilot project, NDPL intends to extend to more and more areas.



- 2.286 BRPL has submitted that the Commission has specified the bill format, which cannot be printed in the hand held devices used by other distribution utilities in the country.
- 2.287 BYPL has appreciated the comment. (7)
- 2.288 The Petitioner has submitted that the said issue is not related to Tariff Petition but pertains to Performance Standard Regulations. Also, the fixation of tariff is the sole prerogative of the Commission and the Commission may decide accordingly. (8)
- 2.289 The Petitioner has submitted that there are times when we face shortage of power due to reasons beyond our control and to meet this peak demand, we have to procure costlier power to ensure that our consumers are not subjected to load shedding. However, while procuring this power, we ensure that we procure the cheapest power available at the time of shortage. Further, DERC has also come out with "Directions for Procurement and Sale of Power by Distribution Licensee".(9)
- 2.290 The Petitioner has submitted that the fixation of tariff is the sole prerogative of the Commission and the Commission may decide accordingly.(10)
- 2.291 The Petitioner in response to the same has submitted that the act of admission of a petition is an administrative act by the Commission which is only highlighting the fact of a petition being correct as far as filing of petition its procedure, fee for filing etc. is concerned. This admission order does not in any way grant any vested right in favour of the Petitioner to be granted relief as prayed for in the said petition. This is also in accordance with the procedure prescribed under Conduct of Business Regulations of DERC. The Commission post admission issues notices to seek response to the same followed by detailed hearing. In any case, the Commission had vide its various public notices published in leading dailies invited comments with regard to extension of MYT regulations and resetting of AT&C loss targets for Licensees since March 2011 which was duly responded by various stakeholders, and hence the admission of petition was not unjustified.(11)
- 2.292 The Petitioner has submitted that the fixation of tariff is the sole prerogative of the Commission and the Commission may decide accordingly. (12)
- 2.293 Not replied (13)
- 2.294 Not replied (14)
- 2.295 Not replied (15)
- 2.296 Not replied (16)

## **Commissions'** Views

- 2.297 The Commission has directed the Distribution licensees to provide option to Consumer of getting their electricity bills in Hindi. (1)
- 2.298 The Commission noticed that section 64(2) of the Electricity Act, 2003 provides that every applicant shall publish the application in such abridged form and manner as



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may be specified by the Commission, which is being followed by the Commission.. However, the Commission will endeavour to standardise the format for the ARR Petition for next Financial Year.(2)

- 2.299 The Commission is of the view that the existing slabs should continue for the time being. The Commission is of the view that this issue shall be re-visited at the time of formulating the next MYT Order. (3)
- 2.300 Consumer Grievance Redressal Forums are established in accordance with the provisions of Electricity Act, 2003 and Delhi Electricity Regulatory Commission (Redressal of Consumers' Grievances) Regulations, 2003 dated 10.06.2004. The appointment of Chairman and Members of CGRF are approved by the Commission. Ever since CGRF came into existence, about 80% of cases decided have gone in favour of consumers. Therefore, it is felt that the CGRF is functioning independently. The Distribution licensees have officers specifically for dealing with consumer grievances. The consumer grievances are also looked into by the Public Grievances Cell of the Government of NCT of Delhi which coordinates with the Distribution licensees for resolution of the grievances. The Commission has taken up the process of review of the existing regulations so as to strengthens the bodies and increase their independence.(4)
- 2.301 Distribution licensees are authorised under section 126 and 135 of the Electricity Act, 2003 and under the DERC (Performance Standards & Supply Code) Regulations, 2007 to inspect the premises where unauthorised use of electricity or theft of electricity is suspected. The Commission is of the opinion that it is not appropriate to intervene or take up the matters, for which the duty has been cast on the Distribution licensees under the Act. The stakeholders may strengthen the hands of the Distribution licensees by providing information regarding theft/tapping etc. to the enforcement cell.(5)
- 2.302 The Temples are presently falling under the domestic category; and the Commission is of the view that the existing slabs should continue for the time being. (6)
- 2.303 The Commission directed the Distribution licensees to submit the procedure for spot billing connected with modem to the Commission for consideration. (7)
- 2.304 The Commission is in the process of amending the Supply Code & Performance Standards Regulations. The Commission shall deal with this issue at the time of finalisation of Supply code and performance standard Regulations.(8)
- 2.305 The Commission has already directed the Petitioner to arrange /procure power from long term sources as well as expedite the setting up of power plants to have reliable and regular supply of power. The Commission has also directed the DISCOMs vide its letter dated 21.10.2009 that their endeavour should be to provide uninterrupted power supply to the consumers in their respective areas. The Licensee shall ensure that electricity which could not be served due to any reason what-so-ever (including maintenance schedule, break-downs, load shedding etc.) shall not exceed 1% of the total energy supplied by them in any particular month, except in cases of force-majeure events which are beyond the control of the Licensee.



- 2.306 The Commission has also noted that the load curve in Delhi is peculiar in nature with high morning and evening peaks and very low load demand during night hours. It is due to the fact that a majority of the load in Delhi is of commercial establishments, office buildings, which have requirement primarily during day time. The round-the-clock industries, which are a common feature in most of the States and which contribute towards flattening of the load curve are very little in Delhi.
- 2.307 However, buying only day time power/peak hour power is very costly. Further, slotwise power may not even be available. Therefore, to cater to the peak demand during day time, DISCOMs have to buy Round-the-Clock (RTC) Power. The surplus power during night hours/off peak hours get sold at the prevailing short-term market rate/Power Exchange Rate/UI Rate. The Commission has put in place a mechanism whereby all the power procurements are approved by Delhi Power Procurement Group, comprising of SLDC, DTL, NDPL, BRPL, BYPL. The Commission has also issued short-term power procurement guidelines on 20.01.2010 whereby it has been stipulated that all the procurement of power on short-term shall be done through open competitive bidding.
- 2.308 The Central Electricity Regulatory Commission has issued amendments to UI Regulations vide Order dated 28.04.2010, effective from 03.05.2010, whereby the overdrawl of power by the beneficiaries in excess of their schedule is liable to a 40% additional UI for overdrawls below frequency of 49.5 Hz., which translates to Rs.12.22/kWh. Further, as an exemplary deterrent on overdrawls, the additional UI rate is 100% on overdrawls below grid frequency 49.2 Hz., which translates to Rs.17.46 /kWh. The effect of this quantum increase in penal UI Rates has been that other State Utilities are generally refraining from overdrawing beyond their schedule. This has resulted in optimum grid frequency and thereby very low UI Rates. (9)
- 2.309 The Commission is in the process of amending the Supply Code & Performance Standards Regulations.
- 2.310 The Commission shall deal with this issue at the time of finalisation of Supply code and performance standard Regulations. (10)
- 2.311 The Tariff Order for the FY 2010-11 was sub-judice before the Hon'ble High Court of Delhi. Hon'ble High Court gave its judgment on the PIL on 23.05.2011 in the matter of Nand Kishore Garg Vs. Govt. Of NCT of Delhi and others; and inter alia directed the Commission to proceed afresh by following due procedure and do the needful regarding determination of tariff.
- 2.312 The Commission has in the said Sub-judice Draft Tariff Order for the FY 2010-11 projected a revenue surplus of Rs.3577 crores in respect of all the three DISCOMs viz., BRPL, BYPL and NDPL. While processing the True-Up of FY 2008-09 and 2009-10 and this Tariff Order for FY 2011-12, the Commission has observed that the stated surplus of Rs.3577 crores which had been arrived at in the draft Tariff Order of FY 2010-11 did not materialise on account of non-availability of power from new power stations against the earlier estimates, reduction in the rate of sale of surplus power and increase in the cost of power purchase. Detailed Analysis of the purported surplus for FY 2010-11 is attached as **Annexure –XII** to this Order.



Since the Tariff determination process for FY 2011-12 was in vogue at the time the judgment of Hon'ble High Court of Delhi had come, the Commission decided to take up the true up FY 2008-09 also along with the matter of True up of FY 2009-10 and ARR for FY 2011-12. In respect of True-Up of FY 2008-09, the Commission has decided to maintain the decisions of the Commission, available in the draft Tariff Order in FY 2010-11 except for re-working some figures based on fresh inputs received. (11)

- 2.313 The Commission has already allowed domestic tariff for the professionals (including lawyers) who are using their residence for professional purposes in accordance with MPD 2021.In respect of the Chamber of the Lawyers in Court Complexes, the Commission is of the view that the provision of professional services in the Chamber does not warrant domestic tariff.
- 2.314 The Commission will take up the matter with the DISCOMs for single point delivery of power in Industrial Estates separately, after the issue of Tariff Order.(13)
- 2.315 The Govt of National Capital Territory of Delhi (GoNCTD) has already constituted Electricity Consumers Advocacy Forum (ECAF) who are giving advice to the consumers on electricity related matters. Further, the Commission also appointed officers of the rank of Joint Director and published their names in national dailies for assisting the consumers in understanding the tariff petitions. Some of the consumers also came forward and took the help of these officers.

It is also pertinent to mention that a dedicated officer, on a regular basis, Deputy Director (Consumer Affairs), already deputed in the Commission for monitoring and strengthening the consumer redressal grievance mechanism in place. (14)

- 2.316 The process for simplification of transfer of meters to new owners of property is a matter pertaining to Delhi Electricity (Supply Code and Performance Standards) Regulations, 2007 and the same shall be dealt with during the revision of the said Regulations.(15)
- 2.317 The Commission is of the opinion that provision for ensuring that adequate time (15 days) is available to the consumers for payment of bills is a matter pertaining to Delhi Electricity (Supply Code and Performance Standards) Regulations, 2007 and the same shall be dealt with during the revision of the said Regulations. (16)



#### A3: **TRUE UP FOR FY 2008-09**

# Background

- 3.1 The Commission had approved the Aggregate Revenue Requirement (ARR) of NDPL for each year of the Multi Year Tariff Control Period (FY 2007-08 - FY 2010-11) in its Multi Year Tariff Order for NDPL dated February 23, 2008. The MYT Regulations provide for truing up of the uncontrollable parameters of the ARR at the end of each year of the Control Period based on the audited accounts and prudence check by the Commission.
- 3.2 NDPL in its petition has sought truing up of the expenditure and revenue for FY 2008-09. In this Chapter, the Commission has analysed the petition of NDPL in accordance with the principles laid down under MYT Regulations.

# **Policy direction Period**

### Allowance of Capitalisation based upon Electrical Inspector Certificate Request

- 3.3 The Commission in its MYT Order, while truing up till FY 2006-07, has allowed the capitalization of assets based upon the receipt of Electrical Inspector's Certificate and deferred the allowance of depreciation on capitalized assets aggregating to Rs. 242.96 Cr due to Non availability of electrical inspector (EI) certificates.
- 3.4 The Hon'ble ATE vide its judgment dated October 6, 2010 in the Appeal No 36 of 2008 filed by BRPL 06.10.2009 has directed the Commission to allow capitalisation of assets from 16th day from the date of submission of request (complete in all particulars) for issuance of EI certificates.

"For capitalisation of fresh assets the DISCOM shall make appropriate applications to the Electrical Inspector and the capitalization of such assets will be allowed w.e.f. 16th day of filing of the application and payment of necessary fee."

- 3.5 In accordance with the judgment of the Hon'ble ATE, NDPL has claimed additional Rs 2.65 Cr for Policy Direction Period on account of revision of depreciation, return on equity and interest.
- The Commission has appealed against the judgement of the Hon'ble ATE in the 3.6 Hon'ble Supreme Court. Since the matter is sub-judice, the Commission has not implemented the Hon'ble ATE Order in this Order.

## Lower Interest Rate Allowed for Notional Loan

- 3.7 The Commission in its MYT Order, while truing up for FY 2006-07, has allowed the interest rate on notional loan for financing of capital expenditure for FY 2006-07 at 8.5%. The Petitioner has not taken any debt in FY 2006-07 for capital expenditure, the Commission therefore approved normative loan @ interest rate of 8.5%.
- The Petitioner appealed against the Commission's MYT Order in the Hon'ble ATE. 3.8



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3.9 The Hon'ble ATE in its judgment dated May 31, 2011 observed the following:

"The next issue is with reference to the lower interest rate allowed on notional loans. The rate of 8.5% considered by the Delhi Commission was based on the loan taken by the Appellant in the FY 2004-05. The interest rates have subsequently increased which is evident from the moment in the Prime Lending Rate fixed by the State Bank of India. As such, the Delhi Commission has not considered the cost of re-financed Delhi Power Company Loan for allowing interest on notional loan. The Delhi Commission has also ignored the fact that the capital interest rate is to be applied for the period 2006-07. Therefore, the Delhi Commission is directed to allow the interest on notional loan for a particular year based on the market related interest rate prevailing in that year. The said claim has to be considered by the State Commission along with the carrying cost".

3.10 In accordance with the direction of the Hon'ble ATE, the Commission examined the Prime Lending Rate of State Bank of India in FY 2004-05 (when Petitioner last took a loan towards capital expenditure in the Policy direction period @ 8.5%) and FY 2006-07. The applicable Prime Lending Rate of State Bank of India as on April 1 of FY 2004-05, 2006-07 is summarized in the table below:

Prime Lending Rate of State Bank of India					
April 1, 2004	10.25%				
April 1, 2006	10.25%				

3.11 The applicable prime lending rate as on April 1, 2004 and April 1, 2006 were same i.e. 10.25%. Therefore, the Commission has not revised the interest rate on normative loan allowed for FY 2006-07 at 8.5% (at the interest rate applicable on the last capital expenditure loan obtained by the Petitioner during FY 2004-05).

### **Gross Fixed Assets**

3.12 The summary of opening balance of fixed assets, capital investment, asset capitalisation during the year, capital work in progress and closing balance of fixed assets for Policy Direction Period (FY 2002-03 - FY 2006-07) approved by the Commission in MYT Order is summarised in table given below:

	Approved in the MYT Order						
Particulars	FY 2002-03	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07		
A. Opening Gross Fixed Asset	1210.00	1207.62	1438.43	1679.43	1836.43		
B. Opening Capital Work In Progress	-	44.10	112.68	209.88	483.88		
C. Investment in the Year	48.51	299.40	338.20	431.00	271.00		
D. Asset Capitalized	4.41	230.81	241.00	157.00	200.00*		
E. Closing Capital Work In Progress (B+C-D)	44.10	112.68	209.88	483.88	554.88		
F. Less: Asset Retirement	6.80	-	-	-	-		

#### Table 9: GFA, CWIP approved by the Commission (Rs Cr)



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	Approved in the MYT Order					
Particulars	FY 2002-03	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07	
G. Closing Gross Fixed Asset (A+D-F)	1207.62	1438.43	1679.43	1836.43	2036.43	

\*Provisionally approved

- 3.13 The Commission for FY 2002-03 considered asset retirement of Rs 6.80 Cr in accordance with the submission of the Petitioner. However, the Commission did not remove the depreciation on account of the retired assets from the accumulated depreciation for the Petitioner as the depreciation amount for the retired assets was not establish, i.e. though the assets have been retired, the depreciation claimed on it is not known / made available to the Commission.
- 3.14 The Petitioner appealed against the MYT Order of the Commission in the Hon'ble ATE on account of non removal of depreciation on the retired assets from accumulated depreciation.
- 3.15 The Commission in its submission to the Hon'ble ATE agreed to add back assets considered retired to the asset base till the issue of retirement of asset and identification of the depreciation allowed till date on those assets is finalised.
- 3.16 The revised summary of opening balance of fixed assets, capital investment, asset capitalisation during the year, capital work in progress and closing balance of fixed assets for Policy Direction Period (FY 2002-03 FY 2006-07) now approved by the Commission after including retired assets in the asset base is given below:

	Now Approved						
Particulars	FY 2002-03	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07		
A. Opening Gross Fixed Asset	1210.00	1214.41	1445.23	1686.23	1843.23		
B. Opening Capital Work In Progress	-	44.10	112.68	209.88	483.88		
C. Investment in the Year	48.51	299.40	338.20	431.00	271.00		
D. Asset Capitalized	4.41	230.81	241.00	157.00	200.00*		
E. Closing Capital Work In Progress (B+C-D)	44.10	112.68	209.88	483.88	554.88		
F. Less: Asset Retirement	0.00	-	-	-	-		
G. Closing Gross Fixed Asset (A+D-F)	1214.41	1445.23	1686.23	1843.23	2043.23		

 Table 10: GFA, CWIP now approved by the Commission (Rs Cr)

\*Provisionally approved

# Depreciation

- 3.17 Due to the revision of approved asset base of the Petitioner, depreciation will get revised for the Policy Direction Period (FY 2002-03 FY 2006-07) and MYT Period (FY 2007-08 FY 2010-11) as depreciation is linked with the asset base.
- 3.18 Depreciation for Policy Direction Period (FY 2002-03 FY 2006-07) approved by the Commission in the MYT Order is shown below:



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	Approve	l in the M	T Order		
Particulars	FY 2002-03	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07
Opening GFA (Rs Cr)	1210.0#	1207.62	1438.43	1679.43	1836.43
Depreciation Rate (%)	6.69%	6.69%	6.69%	6.69%	6.69%
Depreciation (Rs Cr)	60.71*	80.79	96.23	112.35	122.86
Accumulated Depreciation (Rs Cr)	350.71#	431.50	527.73	640.09	762.94

<sup>#</sup>*Rs* 290 Cr was accumulated depreciation as per Transfer Scheme \*For 9 Months

3.19 Revised depreciation for the Policy Direction Period (FY 2002-03 – FY 2006-07) due to change in the revised asset base now approved by the Commission is shown below:

	Now Approved					
Particulars	FY 2002-03	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07	
Opening GFA (Rs Cr)	1210.0#	1214.41	1445.23	1686.23	1843.23	
Depreciation Rate (%)	6.69%	6.69%	6.69%	6.69%	6.69%	
Depreciation now approved (Rs Cr)	60.71*	81.24	96.69	112.81	123.31	
Additional Depreciation Allowed (Rs Cr)	-	0.45	0.45	0.45	0.45	
Accumulated Depreciation (Rs Cr)	350.71#	431.95	528.64	641.46	764.76	

Table 12: Depreciation now approved by the Commission (Rs Cr)

<sup>#</sup>Rs 290 Cr was accumulated depreciation as per Transfer Scheme \*For 9 Months

## Utilization of Depreciation

- 3.20 For the Policy Direction Period (FY 2002-03 FY 2006-07), the Commission had prescribed in detail the priority of utilisation of depreciation in its previous Tariff Orders for Policy Direction Period. The priority order of utilisation of depreciation has been summarised below:
  - (a) Loan Repayment, if any
  - (b) Working Capital Requirement
  - (c) Capital Investment
- 3.21 Loan repayment was considered based on actual repayment schedule of long term loans availed from financial institution/lenders. In case of notional loan, the average notional repayment period of 10 years was considered commencing from the next Financial Year after drawdown of loans for funding through notional loans.
- 3.22 The working capital requirement were estimated by considering two months stores (R&M expenses) and one month cash expenses i.e., salary, A&G and R&M expenses. The Commission had provided funding of Rs 53.15 Cr towards working capital



requirement by utilizing depreciation of Rs 15.37 Cr in FY 2002-03, Rs 18.21 Cr in FY 2003-04 and Rs 19.57 Cr in FY 2004-05.

- 3.23 The remaining unutilized depreciation (after loan repayment and fund for working capital) was considered for capital expenditure.
- 3.24 Utilisation of depreciation approved by the Commission in its review Order dated September 22, 2009 is as follows:

Particular	FY 2002-03	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07
Depreciation Approved	60.71	80.79	96.23	112.35	122.86
Utilized for Debt Repayment	0.00	0.00	1.32	16.58	78.08
Utilized for Working Capital Requirement	15.37	18.21	19.57	-	-
Utilized for Capital Investment	36.95	70.97	75.34	95.77	44.77
Un-utilized Depreciation	8.39	(8.39)	-	-	-

#### Table 13: Depreciation Utilisation approved in review Order

- 3.25 As the depreciation for FY 2003-04, FY 2004-05, FY 2005-06 and FY 2006-07 has been revised (increased) by the Commission in this Order, utilization of depreciation for these years will also go under change.
- 3.26 The utilisation of depreciation now approved for the Policy Direction Period (FY 2002-03 – FY 2006-07) by the Commission in this Order is summarised below:

Particulars	FY 2002-03	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07
Depreciation Approved	60.71	81.24	96.69	112.81	123.31
Utilized for Debt Repayment	0.00	0.00	1.29	16.51	77.98
Utilized for Working Capital Requirement	15.37	18.21	19.57	-	-
Utilized for Capital Investment	36.95	71.43	75.82	96.29	45.33
Un-utilized Depreciation	8.39	(8.39)	-	-	-
Depreciation Approved	60.71	81.24	96.69	112.81	123.31

### Table 14: Utilization of Depreciation now approved (Rs Cr)

### **Means of Finance**

- For the Policy Direction Period (FY 2002-03 FY 2006-07), the Commission had 3.27 prescribed in detail the priority order for means of finance for the capital expenditure approved by the Commission in its previous Tariff Orders, which is summarised below:
  - **Consumer Contribution** (a)
  - APDRP Grant / Loan (b)
  - Unutilised Depreciation including available unutilised depreciation of the (c) previous years



- (d) Balance Funds required balance fund requirement is assumed to be met through a mix of debt and equity by applying a normative debt to equity ratio of 70:30
- 3.28 The Commission had also included the funding through sundry creditors (closing value of the year) as a means of finance for capital investment of the year. The Commission had allowed financing requirement on the fresh capital investment approved for the year and the closing value of the sundry creditors of the previous year.
- 3.29 The means of finance approved for the Policy Direction Period by the Commission in the review Order dated September 22, 2009 is shown below:

Particulars	FY 2002-03	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07
Capital Expenditure (Including IDC and Establishment Expenses)	48.51	299.40	338.20	431.00	271.00
Closing value of Sundry Creditors in Previous Year	-	-	-	-	25.32
Financing Required	48.51	299.40	338.20	431.00	296.32
Funding					
Consumer Contribution	11.56	30.85	108.48	35.99	34.85
APDRP Grant	0.00	17.91	0.00	0.00	0.00
APDRP Loan	0.00	17.91	0.00	0.00	0.00
Depreciation	36.95	70.97	75.34	95.77	44.77
Creditors	0.00	0.00	0.00	25.32	0.00
Internal Accruals	0.00	48.53	46.31	82.17	65.01
Debt	0.00	113.23	108.07	191.74	151.69
Total	48.51	299.40	338.20	431.00	296.32

### Table 15: Means of Finance approved in review Order (Rs Cr)

3.30 Due to change in depreciation and utilisation of depreciation approved by the Commission in this Order, revised means of finance now approved by the Commission for Policy Direction Period is shown below:

Particulars	FY 2002-03	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07
Capital Expenditure (Including IDC and Establishment Expenses)	48.51	299.40	338.20	431.00	271.00
Closing value of Sundry Creditors in Previous Year	-	-	-	-	25.32
Financing Required	48.51	299.40	338.20	431.00	296.32
Funding					
Consumer Contribution	11.56	30.85	108.48	35.99	34.85
APDRP Grant	0.00	17.91	0.00	0.00	0.00
APDRP Loan	0.00	17.91	0.00	0.00	0.00
Depreciation	36.95	71.43	75.82	96.29	45.33



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Particulars	FY 2002-03	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07
Creditors	0.00	0.00	0.00	25.32	0.00
Internal Accruals	0.00	48.39	46.17	82.02	64.84
Debt	0.00	112.91	107.73	191.38	151.30
Total	48.51	299.40	338.20	431.00	296.32

3.31 The year-wise loan details i.e. principle outstanding, repayment during the year, interest rate and interest expense approved by the Commission in the review Order dated September 22, 2009 and approved now for FY 2003-04 – FY 2006-07 is shown in the tables below:

#### Table 17: Loan details for FY 2003-04 approved in review Order

Loan	Opening Balance	Addition	Repayment	Closing Balance	Interest Rate	Interest Approved
APDRP Loan	0.00	17.91	0.00	17.91	11.5%	1.12
IDFC Loan 1	0.00	70.00	0.00	70.00	8.54%	1.47
PFC Loan 1	0.00	30.00	0.00	30.00	8.5%	0.01
Notional Loan 1	0.00	13.23	0.00	13.23	8.5%	0.56
Total	0.00	131.14	0.00	131.14		3.15
DPCL Loan	552.00	0.00	0.00	552.00		0.00
Grand Total	552.00	131.14	0.00	683.14		3.15

#### Table 18: Loan details for FY 2003-04 now approved

Loan	Opening Balance	Addition	Repayment	Closing Balance	Interest Rate	Interest Approved
APDRP Loan	0.00	17.91	0.00	17.91	11.5%	1.12
IDFC Loan 1	0.00	70.00	0.00	70.00	8.54%	1.47
PFC Loan 1	0.00	30.00	0.00	30.00	8.5%	0.01
Notional Loan 1	0.00	12.91	0.00	12.91	8.5%	0.55
Total	0.00	130.82	0.00	130.82		3.14
DPCL Loan	552.00	0.00	0.00	552.00		0.00
Grand Total	552.00	130.82	0.00	682.82		3.14

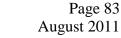
#### Table 19: Loan details for FY 2004-05 approved in review Order

Loan	Opening Balance	Addition	Repayment	Closing Balance	Interest Rate	Interest Approved
APDRP Loan	17.91	0.00	0.00	17.91	11.5%	2.05
IDFC Loan 1	70.00	0.00	0.00	70.00	8.54%	5.98
PFC Loan 1	30.00	0.00	0.00	30.00	8.5%	2.55
Notional Loan 1	13.23	0.00	1.32	11.91	8.5%	1.07
PFC Loan 2	0.00	10.00	0.00	10.00	8.5%	0.78
IDFC Loan 2	0.00	30.00	0.00	30.00	8.52%	2.32
Notional Loan 2	0.00	68.07	0.00	68.07	8.5%	2.89



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Loan	Opening Balance	Addition	Repayment	Closing Balance	Interest Rate	Interest Approved
Total	131.14	108.07	1.32	237.89		17.65
DPCL Loan	552.00	0.00	0.00	552.00		0.00
Grand Total	683.14	108.07	1.32	789.89		17.65

#### Table 20: Loan details for FY 2004-05 now approved

Loan	Opening Balance	Addition	Repayment	Closing Balance	Interest Rate	Interest Approved
APDRP Loan	17.91	0.00	0.00	17.91	11.5%	2.05
IDFC Loan 1	70.00	0.00	0.00	70.00	8.54%	5.98
PFC Loan 1	30.00	0.00	0.00	30.00	8.5%	2.55
Notional Loan 1	12.91	0.00	1.29	11.62	8.5%	1.04
PFC Loan 2	0.00	10.00	0.00	10.00	8.5%	0.78
IDFC Loan 2	0.00	30.00	0.00	30.00	8.52%	2.32
Notional Loan 2	0.00	67.73	0.00	67.73	8.5%	2.88
Total	130.82	107.73	1.29	237.26		17.61
DPCL Loan	552.00	0.00	0.00	552.00		0.00
Grand Total	682.82	107.73	1.29	789.26		17.61

#### Table 21: Loan details for FY 2005-06 approved in review Order

Loan	Opening Balance	Addition	Repayment	Closing Balance	Interest Rate	Interest Approved
APDRP Loan	17.91	0.00	0.45	17.46	12%	2.26
IDFC Loan 1	70.00	0.00	7.00	63.00	8.54%	5.63
PFC Loan 1	30.00	0.00	1.00	29.00	8.69%	2.59
Notional Loan 1	11.91	0.00	1.32	10.58	8.5%	0.96
PFC Loan 2	10.00	0.00	0.00	10.00	8.69%	0.87
IDFC Loan 2	30.00	0.00	0.00	30.00	8.52%	2.56
Notional Loan 2	68.07	0.00	6.81	61.26	8.5%	5.50
Notional Loan 3	0.00	191.74	0.00	191.74	8.5%	8.15
Total	237.89	191.74	16.58	413.05		28.51
DPCL Loan	552.00	0.00	0.00	552.00		0.00
Grand Total	789.89	191.74	16.58	965.05		28.51

#### Table 22: Loan details for FY 2005-06 now approved

Loan	Opening Balance	Addition	Repayment	Closing Balance	Interest Rate	Interest Approved
APDRP Loan	17.91	0.00	0.45	17.46	12%	2.26
IDFC Loan 1	70.00	0.00	7.00	63.00	8.54%	5.63
PFC Loan 1	30.00	0.00	1.00	29.00	8.69%	2.59
Notional Loan 1	11.62	0.00	1.29	10.33	8.5%	0.93
PFC Loan 2	10.00	0.00	0.00	10.00	8.69%	0.87

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Loan	Opening Balance	Addition	Repayment	Closing Balance	Interest Rate	Interest Approved
IDFC Loan 2	30.00	0.00	0.00	30.00	8.52%	2.56
Notional Loan 2	67.73	0.00	6.77	60.95	8.5%	5.47
Notional Loan 3	0.00	191.38	0.00	191.38	8.5%	8.13
Total	237.26	191.38	16.51	412.12		28.44
DPCL Loan	552.00	0.00	0.00	552.00		0.00
Grand Total	789.26	191.38	16.51	964.12		28.44

#### Table 23: Loan details for FY 2006-07 approved in review Order

Loan	Opening Balance	Addition	Repayment	Closing Balance	Interest Rate	Interest Approved
APDRP Loan	17.46	0.00	17.46	0.00	12%	1.04
IDFC Loan 1	63.00	0.00	7.00	56.00	8.54%	5.04
PFC Loan 1	29.00	0.00	3.00	26.00	8.75%	2.38
Notional Loan 1	10.58	0.00	1.32	9.26	8.5%	0.84
PFC Loan 2	10.00	0.00	1.00	9.00	8.69%	0.82
IDFC Loan 2	30.00	0.00	3.00	27.00	8.52%	2.41
Notional Loan 2	61.26	0.00	6.81	54.45	8.5%	4.92
Notional Loan 3	191.74	0.00	19.17	172.57	8.5%	15.48
Notional Loan 4	0.00	151.69	0.00	151.69	8.5%	6.45
Total	413.05	151.69	58.76	505.97		39.38
DPCL Loan	552.00	0.00	552.00	0.00	0%	-
IDFC Loan	0.00	276.00	13.80	262.2	9.2%	18.71
IDBI Loan	0.00	176.00	3.52	172.48	9.00%	12.56
SBS Loan	0.00	50.00	1.00	49.00	8.90%	2.99
SBM Loan	0.00	50.00	1.00	49.00	8.90%	2.99
Grand Total	965.05	703.69	630.08	1038.65		76.63

#### Table 24: Loan details for FY 2006-07 now approved

Loan	Opening Balance	Addition	Repayment	Closing Balance	Interest Rate	Interest Approved
APDRP Loan	17.46	0.00	17.46	0.00	12%	1.04
IDFC Loan 1	63.00	0.00	7.00	56.00	8.54%	5.04
PFC Loan 1	29.00	0.00	3.00	26.00	8.75%	2.38
Notional Loan 1	10.33	0.00	1.29	9.04	8.5%	0.82
PFC Loan 2	10.00	0.00	1.00	9.00	8.69%	0.82
IDFC Loan 2	30.00	0.00	3.00	27.00	8.52%	2.41
Notional Loan 2	60.95	0.00	6.77	54.18	8.5%	4.89
Notional Loan 3	191.38	0.00	19.14	172.24	8.5%	15.45
Notional Loan 4	0.00	151.30	0.00	151.30	8.5%	6.43
Total	412.12	151.30	58.66	504.76		39.29
DPCL Loan	552.00	0.00	552.00	0.00	0%	-

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Loan	Opening Balance	Addition	Repayment	Closing Balance	Interest Rate	Interest Approved
IDFC Loan	0.00	276.00	13.80	262.2	9.2%	18.71
IDBI Loan	0.00	176.00	3.52	172.48	9.00%	12.56
SBS Loan	0.00	50.00	1.00	49.00	8.90%	2.99
SBM Loan	0.00	50.00	1.00	49.00	8.90%	2.99
Grand Total	964.12	703.30	629.98	1037.44		76.54

3.32 The loan schedule approved by the Commission in the review Order dated September 22, 2009 for the Policy Direction Period is shown below:

Particular	FY 2002-03	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07
DPCL Loan					
Opening Balance	552.00	552.00	552.00	552.00	552.00
Addition	0.00	0.00	0.00	0.00	0.00
Repayment	0.00	0.00	0.00	0.00	19.32
Closing Balance	552.00	552.00	552.00	552.00	532.68
Loan taken for Capex					
Opening Balance	0.00	0.00	131.14	237.89	413.05
Addition	0.00	131.14	108.07	191.74	151.69
Repayment	0.00	0.00	1.32	16.58	58.76
Closing Balance	0.00	131.14	237.89	413.05	505.97
Interest Cost	0.00	3.15	18.76*	28.51	78.26**

#### Table 25: Loan Schedule approved in review Order

\*Includes additional interest cost of Rs 1.11 Cr on account of de-capitalization of interest cost of FY 2003-04 in FY 2004-05

\*\*Includes refinancing cost of Rs 1.63 Cr

3.33 Due to change in means of finance now approved, the revised loan schedule approved by the Commission is shown in the below:

Table 26: Loan Schedule now approv	ed
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Particular	FY 2002-03	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07
DPCL Loan					
Opening Balance	552.00	552.00	552.00	552.00	552.00
Addition	0.00	0.00	0.00	0.00	0.00
Repayment	0.00	0.00	0.00	0.00	19.32
Closing Balance	552.00	552.00	552.00	552.00	532.68
Loan taken for Capex					
Opening Balance	0.00	0.00	130.82	237.26	412.12
Addition	0.00	130.82	107.73	191.38	151.30
Repayment	0.00	0.00	1.29	16.51	58.66

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Particular	FY 2002-03	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07
Closing Balance	0.00	130.82	237.26	412.12	504.76
Interest Cost now approved	0.00	3.14	18.72*	28.44	78.17**
Change in interest	0.00	-0.01	-0.04	-0.07	-0.09

\*Includes additional interest cost of Rs 1.11 Cr on account of de-capitalization of interest cost of FY 2003-04 in FY 2004-05

\*\*Includes refinancing cost of Rs 1.63 Cr

The return on equity approved by the Commission in the review Order dated 3.34 September 22, 2009 for the Policy Direction Period is shown below:

Particular	FY 2002-03	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07
Equity Capital	368.00	368.00	368.00	368.00	368.00
Opening Free Reserves	0.00	0.00	48.53	94.84	177.02
Addition	0.00	48.53	46.31	82.17	65.01
Closing Free Reserve	0.00	48.53	94.84	177.02	242.03
Average Equity & Reserves	368.00	392.26	439.68	503.93	577.52
Return @16%	44.16	62.76	70.35	80.63	92.40

### Table 27: Return on Equity approved in review Order

3.35 Due to change in means of finance now approved, the revised equity and return on equity approved by the Commission is shown in the below:

Particular	FY 2002-03	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07
Equity Capital	368.00	368.00	368.00	368.00	368.00
Opening Free Reserves	0.00	0.00	48.39	94.56	176.58
Addition	0.00	48.39	46.17	82.02	64.84
Closing Free Reserve	0.00	48.39	94.56	176.58	241.42
Average Equity & Reserves	368.00	392.20	439.48	503.57	577.00
Return @16%	44.16	62.75	70.33	80.57	92.32
Change in RoE	0	-0.01	-0.03	-0.06	-0.08

#### Table 28: Return on Equity (RoE) now approved

Net impact of revision in depreciation, interest on loan and return on equity for the 3.36 Policy Direction Period (FY 2002-03 to FY 2006-07) approved by the Commission is shown in the below:

#### Table 29: Net impact of Past True up approved by the Commission (Rs Cr)

Particulars	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07
Opening Gap	-	0.47	0.91	1.34
Change in Depreciation	0.45	0.45	0.45	0.45
Change in Interest on Loan	-0.01	-0.04	-0.07	-0.09
Change in Return on Equity	-0.01	-0.03	-0.06	-0.08



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Particulars	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07
Total	0.43	0.85	1.24	1.62
Carrying Cost (in %)	9%	9%	9%	9%
Carrying Cost ( In Rs Cr)	0.04	0.06	0.10	0.13
Closing Revenue Gap	0.47	0.91	1.34	1.75

# **MYT Period**

### Depreciation

3.37 The summary of opening and closing GFA approved by the Commission in MYT Order for the Control Period is given in the table below.

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Opening Balance of GFA	2036.43	2556.43	2956.43	3181.43
Asset Additions	520.00	400.00	225.00	200.00
Reduction	0.00	0.00	0.00	0.00
Closing Balance of GFA	2556.43	2956.43	3181.43	3381.43

3.38 The Commission had also allocated the closing balance of GFA for FY 2006-07 (opening GFA for FY 2007-08) into different asset categories in the same ratio as that in the closing balance of GFA in the submission made by the Petitioner for FY 2006-07.

Particulars	FY 2007-08 (Petition)	Ratio (%)	FY 2007-08 (MYT Order)
Land & Land rights	0.00	0.00%	0.00
Building and Civil Works	175.75	7.71%	156.97
Hydraulic Works	0.00	0.00%	0.00
Other Civil Works	0.00	0.00%	0.00
Plant & Machinery	848.29	37.21%	757.67
Line Cable Networks etc.	926.61	40.64%	827.61
Lightening Arrestors	16.34	0.72%	14.59
Air Conditioning Plants	0.00	0.00%	0.00
Communication equipment	0.00	0.00%	0.00
Meters	252.13	11.06%	225.19
Vehicles	12.09	0.53%	10.80
Furniture & fixtures	7.18	0.31%	6.41
Office Equipments	41.63	1.83%	37.18
Assets Purchased in second hand	0.00	0.00%	0.00
Assets of Partnership projects etc. (included in above heads)	0.00	0.00%	0.00

### Table 31: Opening GFA for FY 2007-08 (Rs Cr)



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Particulars	FY 2007-08 (Petition)	Ratio (%)	FY 2007-08 (MYT Order)
Assets taken over & pending final valuation	0.00	0.00%	0.00
Computers	0.00	0.00%	0.00
Motor and Pump	0.00	0.00%	0.00
Fault Locating Equipment	0.00	0.00%	0.00
Total	2280.01	100%	2036.43

- 3.39 The Commission had considered asset addition of Rs 1345 Cr during the Control Period, against the proposed addition of Rs 1153.16 Cr. For purpose of simplicity, the Commission has considered all the differences between proposed and approved values of asset addition to be adjusted in all the assets in the proportion of asset addition proposed by the Petitioner for the respective year of the Control Period.
- 3.40 Based on the average of opening and closing value of assets approved during the Control Period and the rates of depreciation, specified in the MYT Regulations, the Commission had approved the depreciation for each year of the Control Period. Also, while approving the depreciation for the Control Period the Commission has not included the AAD approved for the respective years. The Commission had approved the following depreciation for each year of the Control Period:

		Approved	in the MYI	<b>Order</b>	
Asset Category	Rate	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Land & Land rights	0.00%	0.00	0.00	0.00	0.00
Building and Civil Works					
Office Building	1.80%	2.43	2.74	3.01	3.16
Housing Colony	1.80%	0.47	0.47	0.47	0.47
Temporary Structure	1.80%	0.06	0.06	0.06	0.06
Other Civil Works	1.80%	0.12	0.32	0.44	0.51
Plant & Machinery					
Power Transformers and kiosks	3.60%	13.34	17.06	19.36	21.03
Distribution transformers and kiosks	3.60%	0.00	0.00	0.00	0.00
Other sub Station apparatus	3.60%	1.62	1.76	1.84	1.90
Switchgears, Control gear & Protection	3.60%	16.23	18.99	20.70	21.95
Batteries	18.00%	0.68	0.74	0.77	0.79
Line Cable Networks etc.					
Overhead lines up to 11kV	3.60%	19.24	22.62	24.96	26.67
Underground cables up to 11kV	2.57%	9.88	11.64	12.86	13.75
Others	6.00%	0.15	0.23	0.29	0.33
Lightening Arrestors (Station Type)	3.60%	0.53	0.53	0.53	0.53
Communication equipment	6.00%	0.00	0.00	0.00	0.00
Meters	6.00%	15.03	18.29	20.81	22.32
Vehicles	18.00%	2.20	3.04	3.87	4.22

#### Table 32: Depreciation Approved for the Control Period in MYT Order (Rs Cr.)



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	Approved in the MYT Order						
Asset Category	Rate	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11		
Furniture & fixtures	6.00%	0.47	0.75	1.03	1.14		
Office Equipments	6.00%	2.92	4.13	4.87	5.18		
Any other items	3.60%	0.00	0.00	0.00	0.00		
Total Depreciation*		85.36	103.36	115.85	124.02		

3.41 The Commission observes that it had erroneously allowed depreciation on consumer contributions and grants for the MYT Control Period (FY 2007-08 – FY 2010-11). As per the MYT Regulations,

"5.13 ......

Provided that depreciation shall not be allowed on assets funded by any capital subsidy/grant."

- 3.42 Total consumer contribution received by the Petitioner till FY 2006-07 was Rs 221.73 Cr. As the Commission allows depreciation only on assets capitalised, the Commission directed the Petitioner to submit the total consumer contribution capitalised till FY 2006-07 by the Petitioner through its letter dated February 25, 2010.
- 3.43 The Petitioner through its letter dated February 26, 2010 informed the Commission that consumer contribution capitalised till FY 2006-07 was Rs 74.77 Cr and consumer contribution towards CWIP as on April 1, 2007 was Rs. 146.96 Cr.
- 3.44 The Commission in its MYT Order had projected that out of total CWIP of 554.88 Cr of the Petitioner at the beginning of FY 2007-08, Rs 357.50 Cr (approx 65%) will be capitalized in FY 2007-08 itself and the remaining Rs 197.38 Cr will be capitalized in FY 2008-09.
- 3.45 The remaining un-capitalised consumer contribution of Rs 146.96 Cr till FY 2006-07 has been assumed to be capitalized in proportion of asset capitalized from opening CWIP of the Control Period in FY 2007-08 and FY 2008-09 (Rs 94.68 Cr in FY 2007-08 and Rs 52.28 Cr in FY 2008-09).
- 3.46 The Commission in its MYT Order has assumed the following consumer contribution capitalisation schedule for fresh consumer contribution received during the MYT Period:

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Consumer Contribution Received	94.00	22.00	20.00	25.00
Consumer Contribution Capitalised out of Consumer Contribution received during MYT Period	47.00	37.06	36.08	20.87

Table 33: Fresh Consumer Contribution received and capitalised for MYT period (Rs Cr.)



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- 3.47 The Commission had also erroneously not considered Rs 17.91 Cr on account of capital grants while calculating depreciation for the MYT Control Period and allowed depreciation on the same. The Commission has now removed capital grants of Rs 17.91 Cr from asset base while calculating depreciation for the each year of the MYT Control Period.
- 3.48 Details of the consumer contribution capitalised and grants now considered by the Commission while calculating depreciation are shown below:

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Opening Consumer Contribution Capitalised and Grants	92.68	234.36	323.70	359.78
Consumer Contribution Capitalised During the year for Pre MYT Period	94.68	52.28	0.00	0.00
Consumer Contribution Capitalised out of Consumer Contribution received during MYT Period	47.00	37.06	36.08	20.87
Closing Consumer Contribution Capitalized and Grants	234.36	323.70	359.78	380.65
Average Consumer Contribution Capitalised and Grants	163.52	279.03	341.74	370.22

#### Table 34: Consumer Contribution Capitalised and Grants for MYT period (Rs Cr.)

3.49 The Commission in this Order has revised the GFA for the Policy Direction period after including the retired assets in asset base. The Commission now approves following GFA for each year of the MYT Control Period:

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Opening Balance of GFA	2043.23	2563.23	2963.23	3188.23
Asset Additions	520.00	400.00	225.00	200.00
Reduction	0.00	0.00	0.00	0.00
Closing Balance of GFA	2563.23	2963.23	3188.23	3388.23
Average GFA	2303.23	2763.23	3075.73	3288.23

### Table 35: GFA Now Approved by the Commission in For Control Period (Rs Cr)

3.50 The Commission has now considered the following GFA applicable for depreciation during the Control Period:

Table 36: GFA considered by the Commission for Depreciation (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Average GFA	2303.23	2763.23	3075.73	3288.23
Less: Average Consumer Contribution and Grants	163.52	279.03	341.74	370.22
Average GFA now considered for Depreciation	2139.71	2484.2	2733.99	2918.01



- 3.51 The Commission has allocated the GFA considered for depreciation for each year of the Control Period according to the methodology adopted in the MYT Order.
- 3.52 The Commission approves the revised depreciation as shown below based on the average GFA considered for depreciation during the each year of the Control Period and the rates of depreciation, specified in the MYT Regulations:

			Now Approved	ł	
Asset Category	Rate	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Land & Land rights	0.00%	0.00	0.00	0.00	0.00
Building and Civil Works					
Office Building	1.80%	2.27	2.47	2.68	2.81
Housing Colony	1.80%	0.44	0.42	0.42	0.42
Temporary Structure	1.80%	0.06	0.05	0.05	0.05
Other Civil Works	1.80%	0.11	0.29	0.39	0.45
Plant & Machinery					
Power Transformers and kiosks	3.60%	12.43	15.37	17.24	18.70
Distribution transformers and kiosks	3.60%	0.00	0.00	0.00	0.00
Other sub Station apparatus	3.60%	1.51	1.58	1.64	1.69
Switchgears, Control gear & Protection	3.60%	15.12	17.12	18.45	19.52
Batteries	18.00%	0.63	0.66	0.69	0.71
Line Cable Networks etc.					
Overhead lines up to 11kV	3.60%	17.93	20.38	22.24	23.72
Underground cables up to 11kV	2.57%	9.21	10.49	11.46	12.23
Others	6.00%	0.14	0.21	0.26	0.29
Lightening Arrestors (Station Type)	3.60%	0.49	0.47	0.47	0.47
Communication equipment	6.00%	0.00	0.00	0.00	0.00
Meters	6.00%	14.01	16.49	18.54	19.85
Vehicles	18.00%	2.05	2.74	3.44	3.75
Furniture & fixtures	6.00%	0.44	0.67	0.91	1.02
Office Equipments	6.00%	2.72	3.72	4.34	4.61
Any other items	3.60%	0.00	0.00	0.00	0.00
Total Depreciation now approved		79.54	93.15	103.21	110.28
Depreciation approved in MYT Order		85.36	103.36	115.85	124.02
Change in Depreciation		-5.82	-10.21	-12.64	-13.74

## Table 37: Depreciation Now Approved for the Control Period (Rs Cr)

## **Regulatory Rate Base**

3.53 The Regulated Rate Base for each year of the Control Period (FY 2007-08 – FY 2010-11) approved by the Commission in its MYT Order is summarised below:



			Approv	ed in the MYT	[ Order	
	Particulars	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
А	OCFA	2036.43				
В	Opening Balance of Working Capital	53.15				
С	Accumulated Depreciation	762.94				
D	Accumulated Consumer Contribution	221.73				
Е	RRB (opening)		1104.91	1688.34	1961.21	2054.63
F = G-H- I-J	ΔAB		387.64	259.58	73.07	55.11
G	Investments capitalized		520.00	400.00	225.00	200.00
Н	Depreciation		85.36	103.36	115.85	124.02
Ι	AAD		0.00	0.00	0.00	0.00
J	Consumer Contribution		47.00	37.06	36.08	20.87
К	Change in WC		195.80	13.29	20.35	34.34
L = E+F+K	RRB (Closing)	1104.91	1688.34	1961.21	2054.63	2144.08
M = E+F/2+K	RRB(i)		1494.52	1831.42	2018.10	2116.52

- 3.54 The Commission had erroneously subtracted full consumer contribution received by NDPL till FY 2006-07 (Rs 221.73 Cr) while calculating the Regulated Rate Base (RRB) for each year of the Control Period in its MYT Order.
- 3.55 The Petitioner appealed against the MYT Order in Hon'ble ATE on excessive deduction of consumer contribution from RRB. The Petitioner has claimed that only Rs 74.77 Cr of consumer contribution has been capitalized and should have considered in calculation for RRB.
- 3.56 In its submission to the Hon'ble ATE dated September 4, 2008, the Commission agreed with the Petitioner's claim and submitted that

"DERC will give effect to the resultant increase/ (decrease) in the RRB in the truing up order for FY2008 and FY2009 respectively"

- 3.57 In this Order, the Commission has reduced excess consumer contribution of Rs 146.96 Cr while calculating RRB for FY 2007-08.
- 3.58 The Commission in its MYT Order had projected that out of total CWIP of 554.88 Cr of the Petitioner at the beginning of FY 2007-08, Rs 357.50 Cr (approx 65%) will be capitalized in FY 2007-08 itself and the remaining Rs 197.38 Cr will be capitalized in FY 2008-09.



- 3.59 The excess consumer contribution subtracted by the Commission for calculation of RRB of FY 2007-08 has been assumed capitalized in proportion of asset capitalized in FY 2007-08 and FY 2008-09 (Rs 94.68 Cr in FY 2007-08 and Rs 52.28 Cr in FY 2008-09).
- 3.60 The Commission had also erroneously not considered Rs 17.91 Cr on account of capital grants while calculating RRB for FY 2007-08. The Commission has now subtracted capital grants of Rs 17.91 Cr from RRB of FY 2007-08.
- 3.61 The revised RRB now approved by the Commission for the Control Period after including the retired assets in asset base, correction for consumer contribution, capital grants and revised depreciation is provided in the table below:

			Now Approved			
	Particulars	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
А	OCFA	2043.23				
В	Opening Balance of Working Capital	53.15				
С	Accumulated Depreciation	764.76				
D	Accumulated Consumer Contribution	92.68				
E	RRB (opening)		1238.93	1733.51	1964.31	2070.38
F = G-H-I-J	ΔΑΒ		298.78	217.51	85.71	68.85
G	Investments capitalized		520.00	400.00	225.00	200.00
Н	Depreciation		79.54	93.15	103.21	110.28
Ι	AAD		0.00	0.00	0.00	0.00
J	Consumer Contribution		141.68	89.34	36.08	20.87
K	Change in WC		195.80	13.29	20.35	34.34
L = E + F + K	RRB (Closing)	1238.93	1733.51	1964.31	2070.38	2173.57
M = E+F/2+K	RRB(i)		1584.12	1855.56	2027.53	2139.15

### Table 39: Approved RRB for the Control Period (Rs Cr)

# Return on Capital Employed and Supply Margin for the MYT Period

3.62 The Weighted Average Cost of Capital (WACC) is the weighted average cost of debt and equity applying debt and equity ratio identified for the year. WACC has been used in the MYT Tariff Order to determine the Return on Capital Employed (RoCE) as per the provisions of the MYT Regulations, 2007.



- 3.63 For determining the WACC for the Control Period, the Commission had calculated the Debt to Equity ratio considering debt and equity (including free reserves) approved by the Commission for each year. The cost of equity has been considered at 14% and the cost of debt has been considered by dividing the total interest cost (on approved loans) by average of debt approved for that year.
- 3.64 The summary of the same is shown in the table below.

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Equity	619.94	662.10	715.27	770.48
Debt	1182.40	1203.28	1234.89	1257.62
Rate of return on Equity	14.00%	14.00%	14.00%	14.00%
Rate of Return on Debt	9.19%	9.25%	9.28%	9.29%
WACC (RoE at 14%)	10.85%	10.94%	11.01%	11.08%
RRB	1494.52	1831.42	2018.10	2116.52
RoCE	162.11	200.31	222.18	234.56
WACC (RoE at 16%)	11.53%	11.65%	11.74%	11.84%
RoCE (at 16%)	172.39	213.32	236.98	250.64
Supply Margin	10.28	13.00	14.80	16.08

Table 40: WACC / RoCE / Supply Margin computed in the MYT Tariff Order

- 3.65 The Petitioner in its review petition filed to the Commission had submitted that WACC for the Control Period had been erroneously calculated. For the purpose of calculation of WACC average of equity and closing value of debt had been considered which resulted in lower allowance of RoCE to the extent of Rs. 2.86 Cr over the MYT Control Period.
- 3.66 The Commission in its review Order dated 22 September 2009 reviewed the WACC calculation used for the purpose of determination of RoCE and observed that it had inadvertently considered average equity and closing value of debt whereas it should have considered average of debt and equity for calculation of WACC.
- 3.67 As per the MYT Regulations

"5.9 Return on Capital Employed (RoCE) for the year 'i' shall be computed in the following manner:

Where,

WACCi  $RoCE = WACCi * RRB_i$  is the Weighted Average Cost of Capital for each year of the Control Period;

*RRB* - *Regulated Rate Base is the asset base for each year of the Control Period based on the capital investment plan and working capital.* 

5.10 The WACC for each year of the Control Period shall be computed at the start of the Control Period in the following manner:



Where.

$$WACC = \left[\frac{D/E}{1+D/E}\right] * r_d + \left[\frac{1}{1+D/E}\right] * r_e$$

D/E is the Debt to Equity Ratio and for the purpose of determination of tariff, debt-equity ratio as on the Date of Commercial Operation in case of new distribution line or substation or capacity expanded shall be 70:30. Where equity employed is in excess of 30%, the amount of equity for the purpose of tariff shall be limited to 30% and the balance amount shall be considered as notional loan. The interest rate on the amount of equity in excess of 30% treated as notional loan shall be the weighted average rate of the loans of the Licensee for the respective years and shall be further limited to the prescribed rate of return on equity in the Regulations. Where actual equity employed is less than 30%, the actual equity and debt shall be considered.

 $r_d$  is the Cost of Debt and shall be determined at the beginning of the Control Period after considering Licensee's proposals, present cost of debt already contracted by the Licensee, and other relevant factors (risk free returns, risk premium, prime lending rate etc.);

 $r_e$  is the Return on Equity and shall be determined at the beginning of the Control Period after considering CERC norms, Licensee's proposals, previous years' D/E mix and other relevant factors. The cost of equity for the Wheeling Business shall be considered at 14% post tax."

- 3.68 The Commission observes that it had calculated WACC erroneously.
- 3.69 For the Policy Direction Period, the Commission has approved following debt and equity for the capital expenses in this Order:

Particulars	FY 2002-03	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07
Capital Expenditure (Including IDC and Establishment Expenses)	48.51	299.40	338.20	431.00	271.00
Internal Accruals (Equity)	0.00	48.39	46.17	82.02	64.84
Loan	0.00	130.82*	107.73	191.38	151.30

Table 41: Loan and Equity now approved for Capital expenditure (FY 2002-03-FY 2006-07)

\*including APDRP loan of Rs 17.91 Cr

3.70 For the MYT Period the Commission had approved following means of finance:

#### Table 42: Loan & Equity approved in MYT Order for Capital expenditure (FY 2007-08-FY 2010-11)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Capitalisation out of fresh investment from FY 2007-08 onwards	162.50	202.62	225.00	200.00
Internal Accruals (Equity)	34.65	49.67	56.68	53.74



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Particulars	FY	FY	FY	FY
	2007-08	2008-09	2009-10	2010-11
Loan	80.85	115.89	132.24	125.39

3.71 In the Policy direction period, the Commission had not allowed any loan towards working capital as Commission was allowing funding of working capital through depreciation. The Commission had approved following working capital and its funding in its MYT Order:

Table 43: Working Canital and its fund	ing approved in MYT Order (FY 2007-08-FY 2010-11)
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Particulars	FY 2007- 08	FY 2008-09	FY 2009-10	FY 2010-11
Working Capital	248.95	262.24	282.59	316.93
Funding through past depreciation	53.15	53.15	53.15	53.15
Opening Working Capital Loan	0.00	195.80	209.09	229.44
Additional Working Capital Loan	195.80	13.29	20.35	34.34
Closing Working Capital Loan	195.80	209.09	229.44	263.78

- 3.72 As per the transfer scheme, opening equity and loan for the Petitioner were Rs 368 Cr and Rs 552 Cr respectively.
- 3.73 The year-wise equity and loan approved by the Commission is shown below:

	Equity and Free Reserve				
Particular	Opening	Addition	Closing	Average	
FY 2002-03	368.00	0.00	368.00	368.00	
FY 2003-04	368.00	48.39	416.39	392.20	
FY 2004-05	416.39	46.17	462.56	439.48	
FY 2005-06	462.56	82.02	544.58	503.77	
FY 2006-07	544.58	64.84	609.42	577.00	
FY 2007-08	609.42	34.65	644.07	626.75	
FY 2008-09	644.07	49.67	693.74	668.90	
FY 2009-10	693.74	56.68	750.41	722.07	
FY 2010-11	750.41	53.74	804.15	777.28	

#### **Table 44: Equity and Free Reserve**

#### Table 45: Loan (including working capital loan)

	Loan				
Particular	Opening	Addition	Closing	Average	
FY 2002-03	552.00	0.00	552.00	552.00	
FY 2003-04	552.00	130.82	682.82	617.41	
FY 2004-05	682.82	107.73	790.55	736.69	
FY 2005-06	790.55	191.38	981.93	886.24	
FY 2006-07	981.93	151.30	1133.22	1057.58	
FY 2007-08	1133.22	276.65	1409.87	1271.55	



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	Loan				
Particular	Opening	Addition	Closing	Average	
FY 2008-09	1409.87	129.18	1539.05	1474.46	
FY 2009-10	1539.05	152.60	1691.65	1615.35	
FY 2010-11	1691.65	159.73	1851.38	1771.51	

3.74 The Commission in this Order is now approving the revised Return on Capital Employed and Supply Margin for the Petitioner based on the revised rate base approved in this Order and revised WACC approved now:

Particular	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Equity	626.75	668.90	722.07	777.28
Debt	1271.55	1474.46	1615.35	1771.51
Rate of return on Equity	14.00%	14.00%	14.00%	14.00%
Rate of Return on Debt	9.15%	9.22%	9.24%	9.26%
WACC	10.75%	10.71%	10.71%	10.71%
RRB	1584.12	1855.56	2027.53	2139.15
RoCE	170.35	198.70	217.17	229.01
WACC (RoE at 16%)	11.41%	11.33%	11.33%	11.32%
RoCE (at 16%)	180.81	210.29	229.70	242.06
Supply Margin	10.46	11.58	12.53	13.05
Total RoCE + Supply Margin Approved in MYT Order*	172.39	213.32	236.98	250.64
Change in RoCE + Supply Margin	8.42	-3.03	-7.28	-8.58

Table 46: WACC / RoCE / Supply Margin now approved

\*ROCE + Supply margin approved in MYT Order has been considered as impact of review order for Control Period has not been considered till now

## Writing Back of Doubtful debt considered as Non Tariff Income

- 3.75 While truing up for FY 2007-08 in the Tariff Order for FY 2009-10 dated May 28, 2009, the Commission had inadvertently added the doubtful debts written back (Rs 0.17 Cr) back as Non Tariff Income.
- 3.76 The Petitioner filed review petition against the Commission Order. In its Review Order dated May 11, 2010, the Commission allowed the review on this account to NDPL. The Commission observed that

"20. The Commission has revisited the trued-up Non-Tariff Income of the Petitioner for F.Y. 2007-08 and has observed that the claim of the Petitioner is valid. There has been an inadvertent error while computing the Non-Tariff Income where the write back of doubtful debts amounting to Rs. 0.17 Cr. have been considered as a part of Non-Tariff Income. The Commission, therefore, allows the amount of Rs. 0.17 Cr."



3.77 The Commission in this Order reduces non tariff income of the Petitioner for FY 2007-08 by 0.17 Cr.

### Equity Component for margin on working capital requirement

- 3.78 The Commission in the MYT Order had allowed working capital as 100% debt financed.
- 3.79 The Petitioner appealed against the MYT Order of the Commission stating that the Commission has considered the funding of the entire working capital requirement by way of loan and has allowed an interest @9.5% on the same, which is contrary to the norm of debt/ equity ratio of 70:30 of the power sector.
- 3.80 The Commission in its submission to the Hon'ble ATE has submitted that the MYT Regulations 2007 allows 30% equity funding only in case of capital expenditure. It nowhere mentions that the Commission will allow 30% equity for working capital funding. It is a settled procedure that for working capital requirement, all Regulatory Commissions follow 100% Debt financing and the Commission has followed the same practice. The Commission also submitted that the 25% margin for working capital submitted by NDPL through
  - (a) 15% by receivables and
  - (b) 10% by inventories
- 3.81 Receivables are available in the balance sheet of the NDPL on account of receivables from Consumers from sale of electricity/through tariff and are not the share holder's money. Similarly, inventories are on account of R&M expenditure approved by the Commission and have been used as mortgage to get funding of the working capital. Receivables and inventories are the current asset of the business and these have been used as mortgage for providing margin money and NDPL has not brought in shareholder's money for funding working capital. This is not any additional investment made by the NDPL
- 3.82 The Hon'ble ATE in its Order dated May 31, 2011 on appeal no 52 of 2008 filed by the Petitioner directed the Commission to re-compute the weighted average cost of capital for each year of the Control Period considering the debt/ equity ratio of 70:30 for financing of the working capital and apply on the respective years Regulated Rate Base for allowance of Return on Capital Employed according to its Regulations.
- 3.83 The Commission has decided to go in appeal against the Hon'ble ATE Order on considering the debt/ equity ratio of 70:30 for financing of the working capital and apply on the respective years Regulated Rate Base for allowance of Return on Capital Employed. The Commission therefore has not implemented the Judgement of the Hon'ble ATE in this regard.

## Financing Cost for delayed payment surcharge

3.84 The Commission, it its Tariff Order for FY 2009-10, while truing up for FY 2007-08 has approved financing cost of 9% on the delayed payment surcharge.



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3.85 The Petitioner appealed in the Hon'ble ATE against the Commission's Order. The Hon'ble ATE in its Order dated July 30, 2010 on appeal no 52 of 2008 filed by the Petitioner has observed that

"The normative working capital compensates the distribution company in delay for the 2 months credit period which is given to the consumers. The late payment surcharge is only if the delay is more than the normative credit period. For the period of delay beyond normative period, the distribution company has to be compensated with the cost of such additional financing. It is not the case of the Appellant that the late payment surcharge should not be treated as a non-tariff income. The Appellant is only praying that the financing cost is involved due to late payment and as such the Appellant is entitled to the compensation to incur such additional financing cost. Therefore, the financing cost of outstanding dues, i.e. the entire principal amount, should be allowed and it should not be limited to late payment surcharge amount alone. Further, the interest rate which is fixed as 9% is not the prevalent market Lending Rate due to increase in Prime Lending Rate since 2004-05. Therefore, the State Commission is directed to rectify its computation of the financing cost relating to the late payment surcharge for the FY 2007-08 at the prevalent market lending rate during that period keeping in view the prevailing Prime Lending Rate"

- 3.86 The Petitioner had collected late payment surcharge (LPSC) of Rs 15.28 Cr in FY 2007-08 from its Consumers. As the Petitioner charges LPSC @ 18% per annum (1.5% per month), the principle amount on which LPSC has been charged will be 84.88 Cr.
- 3.87 The Commission in its MYT Order dated February 23, 2008 had approved funding of working capital @ 9.5% considering SBI PLR of 12.25% prevalent at the time of issuing MYT Order. The Commission has, therefore, considered the interest rate approved by the Commission for funding on working capital for FY 2007-08. The financing cost approved by the Commission is shown below:

Particular	FY 2007-08
LPSC Collected (@ 18%)	15.28
Principle amount on which LPSC was charged	84.88
Interest Rate for funding of Principle of LPSC	9.5%
Interest now approved on funding of Principle amount of LPSC	8.06
Interest approved in the True Up Order for FY 2007-08	0.69
Additional Interest now approved	7.37

Table 47: Funding of LPSC (Rs Cr)

3.88 The Commission also observes that while calculating the AT&C losses achievement for FY 2007-08, the Commission had considered the gross LPSC collected by the Petitioner as revenue collected. Thus, any benefit on account of overachievement in AT&C loss is being calculated on gross LPSC amount. However, as financing of LPSC is allowed as a cost, the consumer is getting benefit of net LPSC while computing the Non tariff Income (which is subtracted from the ARR of the Petitioner). As consumers are not getting benefit of gross LPSC, the Commission has decided that it will be prudent to consider the LPSC net of expenses (net LPSC has



been considered in total revenue available towards expenses of the Petitioner) while considering collection in the AT&C loss. The Commission while approving AT&C loss for the Petitioner for FY 2007-08 in its Tariff Order for FY 2009-10 dated May 28, 2009 had approved total collection for FY 2007-08 as Rs 2394.47 Cr, which included LPSC of Rs 15.28 Cr. The Commission had also approved AT&C loss of 18.29% and total overachievement on account of higher AT&C Loss reduction as Rs 109.64 Cr.

3.89 The Commission now revise the total collection for FY 2007-08 as Rs 2386.41 Cr (Rs 2394.47 Cr - 8.06 Cr). The revised AT&C loss approved for FY 2007-08 is shown below:

Particulars	FY 2007-08
Total Revenue Collected (Rs Cr)	2386.41
Revenue Billed (Rs Cr)	2323.23
Collection Efficiency (in %)	102.72%
Distribution Losses (in %)	20.72%
AT&C Losses (in %)	18.56%

- 3.90 The revised AT&C losses approved for FY 2007-08 is lower than 22.03% AT&C loss target as specified in the MYT Order.
- 3.91 The Commission also observes that the deployment of CISF force has helped in reduction of AT&C losses. Therefore, any cost on account of CISF should be first adjusted towards the benefit on account of overachievement in reduction of AT&C losses, if any, before passing on any benefit to consumer or the distribution licensee. The Commission also observes that it had allowed CISF expenses of Rs 1.87 Cr erroneously as part of New Initiative in FY 2007-08. The Commission has now reduced the CISF expenses from the benefit on account of overachievement in AT&C losses and taken back from new initiative.
- 3.92 The revised incentive on account of the overachievement in the AT&C loss levels achieved by the Petitioner for FY 2007-08 is as summarised below:

Table 49: Revised Incentive on account of AT&C Loss overachievement for FY 2007-08

Particulars	Units	As per the MYT Order	Actual
A. AT&C Losses	%	22.03%	18.56%
B. Over Achievement/ (Under Achievement)	%	3.47%	
C. Energy Input (MU)	MU	6275.05	
D. Units Realized (MU)	MU	4892.66	5110.18
E. Average Billing Rate (Rs/Unit)	Rs./Unit	4.67	4.67
F. Amount Realized (Rs Cr)	Rs. Cr	2284.83	2386.41
		Х	Y
G. Total Overachievement (Y-X)	Rs. Cr	101.58	



Particulars	Units	As per the Actual MYT Order	
H. Less: CISF Expenses	Rs Cr	1.87	
I. Total Over achievement available for sharing	Rs Cr	99.71	
J. DISCOM Adjustment passed on to consumers in FY 2007-08	ISCOM Adjustment passed on to consumers in FY 2007-08 Rs Cr 29		
K. Benefits to be transferred to Contingency Reserve		20.24	
J. Benefit to be retained by the Petitioner (J/2)	Rs Cr	49.85	
K. Total Revenue Available towards ARR including E-Tax	Rs Cr	2284.83	
L. Less: E Tax	Rs Cr	98.77	
M. Less: Net LPSC	Rs Cr	7.22	
N. Less: DVB Commission	Rs Cr	0.71	
O. Revenue Available for expenses (K-L-M-N)	Rs Cr)	2178.13	

3.93 The Commission in the Tariff Order for FY 2009-10 dated May 28, 2009 had approved net revenue available for expenses as Rs 2170.07 Cr which has been revised to Rs 2178.13 Cr in this Order, net increase of Rs 8.06 Cr.

### **Rebate on Power Purchase**

- 3.94 The Commission, it its Tariff Order for FY 2009-10, while truing for FY 2007-08 has subtracted rebate of Rs 35.94 Cr earned by the Petitioner from the gross power purchase cost.
- 3.95 The Petitioner appealed in the Hon'ble ATE against the Commission's Order. The Petitioner submitted that

"the State Commission wrongly adjusted the rebate earned by the Appellant by making early payment of power purchase as against the power purchase cost. It is contrary to the Regulation 5.7 and 5.23 of the MYT Regulations which allow rebate income to be retained by the distribution company and this does not adversely impact the consumers as the rebate allowed by the generation companies to the distribution companies for pre-payment of the power purchase bills is out of the normative working capital cost and not in addition to the normative working capital cost allowed. It is further contended on behalf of the Appellant that if the payment is made within 30 days of the due date, the distribution company is entitled to 1% rebate and the said rebate can be treated as the non-tariff income but if the rebate earned is above 1% it cannot be treated as a non-tariff income, as the same is purely due to the efficiency of the distribution company/the Appellant"

3.96 In response to the claim of the Petitioner the Commission submitted that *it has* allowed the Petitioner normative working capital of two months receivable plus one month O&M Expenses less one month power purchase cost. The Commission has assumed that average receivable cycle is 2 months for the Petitioner as majority of the consumers (approx 70% of revenue) are being billed monthly and some consumers are being billed bi-monthly (approximately 30% of revenue). Accordingly, whatever cost the Petitioner would incur in 2 months would be funded through the 2 months receivables allowed by Commission as working capital. The 2 months receivables includes power purchase expense for 2 months also. Further, the



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Commission has subtracted one month's power purchase cost as the bills are raised by the generators only at the end of the month i.e. whatever supply is received by a distribution company in month of January, it would receive a bill only on 1st Feb (One month's credit period). If the distribution company pays this bill within 3 days i.e. by 4th Feb in the above case, it would be entitled to a get rebate @ 2%. The present working capital norms allowed by the Commission permits the distribution company to pay the bill on 1st of the month and thus avail maximum rebate of 2% at all times. If the interest on such normative working capital facilities is borne by the consumers, it is very logical and rational that the benefit of rebate would also be given to them. The minimum rebate which DISCOM would avail by paying on 1st of the Month is 2% and it same be even upto 3% as per NTPC rebate scheme for FY2007-08. The normative working capital approved by DERC allows the DISCOMs to make payment on 1st of the every month. The DISCOMS are expected to pay the same on time. Accordingly, by paying on time, it cannot be construed that the DISCOMS are being efficient, on the contrary it is their duty to pay on time.

3.97 The Hon'ble ATE in its judgement dated July 30, 2010 on appeal no 52 of 2008 filed by the Petitioner has observed that

"The second issue relates to the deduction of rebate due to the early payment of the power purchase cost from the ARR. The Appellant, through its efficient management, has paid all the bills immediately on raising of the bills by the generating company and, therefore, it has to be allowed a rebate of 2%. Therefore, there is no justifiable reason for the State Commission to reduce the power purchase cost by rebate earned by the Appellant. The normative working capital provides for power purchase cost for one month. Therefore, rebate of 1% available for payment of power purchase bill within one month should be considered as non-tariff income and to that extent benefit of 1% rebate goes to reducing the ARR of the Appellant. The rebate earned on early payment of power purchase cost cannot be deducted from the power purchase cost and rebate earned only up to 1% alone can be treated as part of the non-tariff income. Therefore treating the rebate income for deduction from the power purchase cost is contrary to the MYT Regulations. As such this issue is answered in favour of the Appellant."

- 3.98 The Petitioner informed the Commission that it had earned rebate on power purchase of 17.34 Cr in FY 2007-08 on account of upto 1% rebate.
- 3.99 The Commission has decided to go in appeal against the Hon'ble ATE Order on considering only 1% rebate on power purchase as the Non tariff Income of the Petitioner. The Commission therefore has not implemented the Judgement of the Hon'ble ATE in this regard. However, the Commission has not subtracted the rebate earned on power purchase from the power purchase cost and considered the same as Non Tariff Income. Due to this, the Commission has allowed additional Rs 35.94 Cr towards purchase and increased the Non Tariff Income by Rs 35.94 Cr.

## Interest Income on Surplus Fund

3.100 The Commission, it its Tariff Order for FY 2009-10, while truing for up FY 2007-08 has considered Interest Income of Rs 3.06 Cr earned by the Petitioner as the Non tariff Income.



3.101 The Petitioner appealed in the Hon'ble ATE against the Commission's Order. The Hon'ble ATE in its Order dated July 30, 2010 has observed that

"The third issue relates to the wrongful deduction of interest on surplus funds out of share-holders' money, etc. from the ARR of the Appellant and treating as a non-tariff income. Only interest income on surplus funds to the extent of delayed payment surcharge and interest on consumer security in excess of the rates specified by the Commission should be considered as non-tariff income for deduction in ARR. Also the interest income on consumer's share of incentive on over-achievement of AT&C losses need to be deducted from ARR. However, the Appellant has argued that he has factored the interest income while computing the carrying cost on the revenue gap. Consequently, the carrying cost is lower to that extent. When the benefit of the same has already been passed on to the consumer, the same cannot be passed on to them by way of interest cost. However, in order to correctly determine the ARR as per the Tariff Regulations, the interest income on delayed payment surcharge and difference in interest rate on consumer security with respect to that specified by the Regulations may be considered as non-tariff income to be deducted from the ARR. Also interest on consumer's share of incentive on over-achievement of AT&C losses has to be deducted from ARR. The Commission will compute the interest income for which credit is to be given to consumer from total interest income. Accordingly, adjustment may be made in carrying cost on the revenue gap claimed by the Appellant to avoid double deduction of the interest income on this account in the ARR. On the remaining surplus fund on Retail Supply Tariff the benefit of interest income is to be retained by the Appellant on account of return on equity earned, overachievement in AT&C losses and efficiency in controllable parameters, working capital, etc. invested in mutual funds/banks. The State Commission cannot erode the benefit to be derived by the distribution company by considering such interest income as a part of the non-tariff income. Accordingly, directed"

3.102 As the Commission has considered the income on consumer security deposit on normative basis and LPSC in Non tariff Income , the Commission has now revised the Non Tariff Income for FY 2007-08 and reduced it by 3.06 Cr.

### Correction of inflation-linked escalation factor for Employee Cost and A&G Expenses

### **Petitioner's Submission**

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



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### **Commission's Analysis**

3.104 As per the MYT Regulations for determination of distribution and retail supply tariff, employee and A&G expenses for the Control Period are to be determined using the following methodology:

"... The O&M expenses for the nth year of the Control Period shall be approved based on the formula shown below:

(a) O&Mn = (R&Mn + EMPn + A&Gn)\*(1-Xn)

(i) Where, R&Mn = K\*GFAn-1

(ii) EMPn + A&Gn = (EMPn-1 + A&Gn-1)\*(INDXn/INDXn-1), and

(iii) INDXn = 0.55 \* CPIn + 0.45 \* WPIn

Where

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

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

... "

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

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

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

(ii) Contrary to MYT Regulations, the Delhi Commission has erroneously applied the inflation factor for the entire Control Period based on the annual basis for the FY 2001-02 to FY 2005-06. Due to this wrong calculation, it has resulted in unjust denial of expenses in the ARR to the extent of several Cr of rupees for the FY 2007-08 to FY 2010-11. For the year in issue, i.e. FY 2007-08, the State Commission has wrongly calculated the immediately preceding 5 years from FY 2001-02 to FY 2005-06. The



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words "immediately preceding 5 years" appearing in 5.4(c) of the Regulations imply immediately preceding 5 years for which the final figures are available. This means immediately preceding 5 years would be FY 2002-03 to FY 2006-07."

3.106 In response to NDPL's claim the Hon'ble ATE has given the following judgement in the matter:

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

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

23. Accordingly this issue is only partly decided in favour of the Appellant to the extent that the indexation factor has to be determined on the basis of actual WPI and CPI for the immediately preceding five years period from FY 2002-03 to FY 2006-07 and not FY 2001-02 to FY 2005-06 as worked out by the State Commission. The State Commission is directed to accordingly allow the O&M Expenses for the Control Period after including CPI/WPI during FY 2006-07 along with the carrying cost."

- 3.107 In accordance with the Judgement of the Hon'ble ATE in Appeal No. 52/2008, the Commission has decided to revise the O&M expenses for the Petitioner. Accordingly, the Commission has re-determined the escalation factor for the Control Period on the basis of actual WPI and CPI for the immediately preceding five years period from FY 2002-03 to FY 2006-07 instead of FY 2001-02 to FY 2005-06 as worked out in the MYT Order . The escalation factor, however, has not been revised on a rolling basis in accordance with the decision of the Hon'ble ATE.
- 3.108 The CPI and WPI values for calculation of revised escalation factor are given in the table below.

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%

#### Table 50: Actual CPI and WPI



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Year	CPI (Overall)	% Growth YoY	WPI (Overall)	% Growth YoY
2003-04	500.33	3.9%	175.90	5.4%
2004-05	519.50	3.8%	187.23	6.4%
2005-06	542.41	4.4%	195.60	4.5%
2006-07	578.75*	6.7%	206.20	5.4%

Source: Ministry of Labour Website, http://labourbureau.nic.in and Ministry of Commerce and Industry Website, http://eaindustry.nic.in/Download\_Data\_9394.html

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

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

Year	Projected Growth in CPI		CPI (Overall)	Projected in W		WPI (Overall)
	Approved in MYT Order	Approved Now	Approved Now	Approved in MYT Order	Approved Now	Approved Now
2007-08	3.98%	4.55%	605.11	4.69%	5.03%	216.58
2008-09	3.98%	4.55%	632.67	4.69%	5.03%	227.48
2009-10	3.98%	4.55%	661.49	4.69%	5.03%	238.93
2010-11	3.98%	4.55%	691.62	4.69%	5.03%	250.96

#### Table 51: Projected CPI and WPI during the Control Period

3.111 The Commission has determined the inflation factor for the  $n^{th}$  year (INDX<sub>n</sub>) 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<sub>n</sub>/ INDX<sub>n-1</sub>) as shown in the table below.

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

#### Table 52: Revised Escalation Factor for the Control Period

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



Table 53: Re	evised A&G	Expenses (R	s Cr)
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Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
A&G Expenses approved in MYT Order	30.92	32.21	33.54	34.94
A&G Expenses approved now	31.08	32.52	34.04	35.63

### Table 54: Revised Employee Expenses (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Employee Cost (excluding impact of 6 <sup>th</sup> Pay Commission) Approved in MYT Order	136.18	141.83	147.72	153.85
Employee Cost (excluding impact of 6 <sup>th</sup> Pay Commission) Approved Now	136.84	143.22	149.89	156.88

## Impact of Recommendations of 6<sup>th</sup> Pay Commission

### **Petitioner's Submission**

- 3.113 The Petitioner has submitted that the employee expenses approved for the years FY 2007-08 to FY 2010-11 have to be revised to take into account the actual increase in employee expenses on account of 6<sup>th</sup> Pay Commission. Since the 6<sup>th</sup> Pay recommendations have been implemented in the month of October 2009 and w.e.f. January 1, 2006.
- 3.114 The year wise break-up of the 6<sup>th</sup> Pay Commission Arrears has been submitted by the Petitioner in the additional information as given in Table 55 below:

Particulars	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10
Increase in Employee Cost due to New Allowances	0.00	0.00	0.00	6.88	12.11
Total Additional Amount Submitted on account of Wage Revision	3.87	20.19	21.78	23.46	24.13

### Table 55: Impact of Wage Revision as submitted by the Petitioner (Rs Cr)

### **Commission's Analysis**

- 3.115 The Commission in its MYT Order had anticipated additional expenditure on account of wage revision expected due to implementation of recommendations of the 6<sup>th</sup> Pay Commission.
- 3.116 While approving employee cost for the Control Period it had allowed additional cost for FY 2005-06 and FY 2006-07 and had stated:

"4.116 The Commission has recognised the uncontrollable nature of the  $6^{th}$  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,



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2006, the Commission has considered an increase of 10% in total employee expenses for the values in FY 2005-06 (3 months) and FY 2006-07 due to the same.

4.117 Based on this, the Commission has calculated the revised employee costs for FY 2005-06 and FY 2006-07 and the arrears arising out of it..."

3.117 The actual impact of wage revision on employee cost of FY 2005-06 and FY 2006-07 has now been submitted as Rs 3.87 Cr and Rs 20.19 Cr. Accordingly, the revised employee cost for the two years is shown in the table below.

	FY 2005-06	FY 2006-07
Net trued up Employee Cost Approved in MYT Order	107.69	130.75
Additional amount approved now on account of wage revision	3.87	20.19
Revised Employee Cost	111.56	150.94

Table 56: Revised Employee Expenses for FY 2005-06 and FY 2006-07 (Rs Cr)

- 3.118 For considering the impact of wage revision on employee cost for each year from FY 2007-08 to FY 2010-11 the Commission, in its MYT Order, had increased the net trued up employee cost, accruing to only DVB employees, of the base year (FY 2006-07) by 10%, and had escalated the total base employee expenses of DVB (increased) and non- DVB employees by the annual escalation factor to arrive at the approved employee cost for each year from FY 2007-08 to FY 2010-11.
- 3.119 The base employee expenses of the DVB employees had been increased by 10% since the actual impact of wage revision on the base expenses was not available at the time. However, since the actual impact of wage revision on employee cost for FY 2006-07 is now available, the employee expenses of the base year have been revised as shown in Table 56 above. The revised employee expenses have been escalated by the relevant escalation factor to arrive at the employee expenses for each year from FY 2007-08 to FY 2010-11 as would have been done at the time of deciding the MYT tariff if the revised employee expenses for FY 2006-07 had been known. The revised trajectory for employee expenses for FY 2007-08 to FY 2010-11 after revision in the base is shown below:

Table 57. Impact of Wage De	avision on Employee Cost one	waved by the Commission (Da Cu)
Table 57: Impact of wage Ke	evision on Employee Cost app	proved by the Commission (Rs Cr)

	Base Year	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Base Employee Cost for FY 2006-07 Revised (asshown inTable 56)	150.94				
Escalation Factor		1.0466	1.0466	1.0466	1.0466
Employee Cost (Including 6th Pay Commission impact) – Revised (B)		157.98	165.34	173.04	181.11

3.120 Hence, the Commission has allowed arrears on account of revision of base year (FY 2006-07) salary for FY 2007-08 to FY 2009-10, as shown in the table below:



	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Employee Cost (excluding 6th Pay Commission) – Revised on account of revision of Inflation Factor (A)	136.84	143.22	149.89	156.88
Employee Cost (Including 6th Pay Commission impact) – Revised (B)	157.98	165.34	173.04	181.11
Arrears on account of Revision of Base Year Salary (B-A)	21.13	22.12	23.15	24.23

### Table 58: Arrear approved for FY 2007-08-FY 2010-11 due to revision of base year salary(Rs Cr)

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

### Table 59: Additional Amount allowed on Wage Revision (Rs Cr)

Particulars	FY	FY	FY	FY
	2007-08	2008-09	2009-10	2010-11
Amount allowed due to New Allowances	0	6.88	12.11	12.67

3.122 Hence, the total Arrears allowed by the Commission for FY 2007-08 to FY 2010-11 including the additional allowances paid by the Petitioner in FY 2008-09 and FY 2009-10 is shown in the table below:

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Arrears on account of Revision of Base Year Salary (From Table 58)	21.13	22.12	23.15	24.23
Amount allowed due to New Allowances	0	6.88	12.11	12.67
Total Arrears Approved	21.13	29.00	35.26	36.90

Table 60: Total Arrears approved for FY 2007-08 to FY 2010-11 (Rs Cr)

3.123 The Commission while approving the employee cost in the MYT Order had expected the arrears on account of revision of employee costs to be paid in FY 2008-09 and had considered the payment of arrears in the total employee cost approved for FY 2008-09. Similarly, the increase in salaries had been considered for each year, but the impact of such increase had only been taken from FY 2008-09 onwards. However, the arrears on account of wage revision were only partly paid by the Petitioner in FY 2008-09 (Rs 17.90 Cr was paid as interim relief in FY 2008-09). The majority of the arrears were paid in FY 2009-10 and the revision in salaries was affected only from



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October, 2009. Accordingly, while the increase in salaries has been considered for each year, the payment of arrears has been considered partly in FY 2008-09 (Rs 17.90 Cr) and remaining in FY 2009-10 (all arrears excluding Rs 17.90 Cr paid in FY 2008-09). Further, the impact of increase in salaries has only been taken from FY 2010-11 onwards.

Particulars	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Additional amount approved now on account of wage revision (From Table 56)	3.87	20.19				
Arrears approved on account of Revision of Base Year Salary			21.13	22.12	23.15	24.23
Amount approved due to New Allowances			0	6.88	12.11	12.67
Total Arrears approved	3.87	20.19	21.13	29.00	35.26	36.90
Accumulated Arrears Pay Out approved			-	17.90	91.55	-
Approved Increase in Salary						36.90

### Table 62: Revised Employee Expenses (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Employee Cost Allowed - MYT Order (A)	136.18	166.47	156.07	162.55
Employee Cost (excluding 6th Pay Commission) – Revised on account of revision of Inflation Factor (B)	136.84	143.22	149.89	156.88
Arrears (C)	-	17.90	91.55	-
Increase in Salaries in FY 2010-11 (D)	-	-	-	36.90
Employee Cost Revised (E=B+C+D)	136.84	161.12	241.45	193.78
Difference from MYT Order (E-A)	0.67	-5.35	85.38	31.23

- 3.124 In addition to the above mentioned revision in the employee expenses, the Petitioner through its letter dated June 24, 2011 has prayed for increase in employee expense on normative basis on account of increase in consumer base.
- 3.125 The Commission observes that the Petitioner has not included increase in employee expense on normative basis on account of increase in consumer base its True Up petition for FY 2008-09 and FY 2009-10 and stakeholders were not allowed to offer their comments on the same
- 3.126 The Commission further observes that Petitioner in Petition has prayed for 10% increase in salary of Non-DVB employees over and above the employee expenses approved by the Commission. The Petitioner has also prayed for allowance of actual salary of FRSR employees.
- 3.127 The Petitioner has followed both normative and actual approach for claiming the employee expenses in its prayers, whichever suits the Petitioner's requirement.
- 3.128 The Commission during Policy Direction Period had allowed the Petitioner an expenditure of Rs 106.07 Cr on account of special voluntary retirement scheme



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offered by the Petitioner as the Petitioner has submitted that it has surplus employees. If the Commission allows any increase in employee base on account of increase in consumer base, it will defy the logic of offering special voluntary retirement scheme to DVB employees and will charge consumers of the Petitioner twice, once for amount paid by the Petitioner on account of special voluntary retirement scheme and later on account of hiring of new employees. The Commission rejects the prayer of the Petitioner to approve increase in employee expense on normative basis on account of increase in consumer base.

## **Capitalisation of Expenses**

## **Capitalisation of Interest**

3.129 The Commission had considered the following interest capitalisation in its MYT Order for the Petitioner:

## Table 63: Interest Capitalisation Approved in MYT Order (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Interest & Finance Charges Capitalised	4.52	9.71	5.69	5.15

- 3.130 The Petitioner appealed against the MYT Order of the Commission in Hon'ble ATE on interest capitalisation by the Commission for each year of the Control Period.
- 3.131 In its written submission to the Hon'ble ATE, the Commission submitted that

For the MYT Period DERC is following the principle of Return on Capital Employed in which it allows Return on Equity and Interest on Loan under RoCE only for the assets capitalized. Any interest cost incurred before capitalization is considered as IDC (Interest During Construction) and would be included in Asset base only after capitalization. DERC would correct this error based on this principle in the True up Order.

- 3.132 Interest expenses of the Petitioner can be divided into two parts interest expenses for loan on Capital Works in Progress and interest expenses for loan on assets capitalised.
- 3.133 In the Policy Direction Period, the Commission used to allow total interest expenses incurred by the licensee under total revenue requirement and subtracted interest expenses for loan on the Capital Works in Progress (Interest Capitalised) as it was capital in nature. The interest capitalised was added to the cost of the asset as Interest During Construction.
- 3.134 In the MYT regime, the Commission is following the principle of Return on Capital Employed (RoCE) as per the MYT Regulations, under which it approves return on equity and interest on loan only for assets capitalized and allows them in the Aggregate Revenue Requirement of the licensee. Any interest cost incurred before capitalization is considered as interest during construction and would be added to the cost of the assets.



3.135 The Commission now rectifies its mistake in this Order and is not considering any interest capitalization while computing the ARR for FY 2008-09 and FY 2010-11. In the True Up Order for FY 2007-08, the Commission had considered interest capitalisation of Rs 4.52 Cr in FY 2007-08. The Commission is also approving additional revenue requirement of Rs 4.52 Cr for FY 2007-08 due to rectification of this mistake for FY 2007-08.

## **Capitalisation of Employee Expenses**

- 3.136 For capitalizing the Employee Expenses for the Control Period, in the MYT Order, the Commission has considered the capitalisation of Employee 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 expenses and that proposed by the Petitioner.
- 3.137 Now as Commission has revised Employee Expenses approved for the each year of the Control Period, the capitalisation of Employee Expenses has also changed.

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Employee Expenses Capitalised in MYT Order	14.50	21.45	16.05	16.08
Revised Employee expenses Capitalised	14.57	21.65	16.28	19.06
Increase in Employee Expense Capitalisation	0.07	0.20	0.23	2.98

### Table 64: Employee Expense Capitalisation (Rs Cr)

# **Interest on Consumer Security Deposit**

- 3.138 The Commission further observed that the Petitioner has not accounted for consumers' security deposits in its petition. The Commission through its letter dated 29 January 2010 directed the Petitioner to submit the details of consumers' security deposits and their utilization during the MYT Period.
- 3.139 The Petitioner through its letter dated February 8, 2010 informed the Commission that it has invested the consumers' security deposits in the business. The details of the Consumer security deposit for FY 2007-08 as per the audited accounts of the Petitioner is shown below:

Particulars	FY 2007-08
Opening Consumer Security Deposit	131.68
Closing Consumer Security Deposit	161.21
Average Consumer Security Deposit	146.45

 Table 65: Consumer Security Deposit (Rs. Cr)

3.140 As per the MYT Regulations,



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

- 3.141 The Commission through its letter dated February 26, 2010 directed the Petitioner to submit the information on interest paid the Petitioner on consumers' security deposits during FY 2007-08.
- 3.142 The Petitioner through its letter dated February 26, 2010 informed the Commission that it had paid interest amount of Rs 9.57 Cr to consumers in FY 2007-08. The Commission observes that Rs 9.57 Cr includes Rs 1.87 Cr on account of interest on consumer security deposit paid for pre privatization period received by DVB which is yet to be transferred to the Petitioner. The Commission in its Order dated April 23, 2007 has already decided that this amount is to be paid by DPCL and therefore cannot be allowed.
- 3.143 As the Petitioner has invested the consumers' security deposits in the business, the Commission is treating the same as funding the revenue gap for the Petitioner. The Commission has allowed carrying cost @ 9.15% for FY 2007-08 for the Petitioner therefore the Commission has assumed consumer security deposit earning @ 9.15% during FY 2007-08. The normative income on consumer security deposit calculated by the Commission is shown below:

Particulars	FY 2007-08
Interest on Consumer Security Deposit paid	7.70
Average Consumer Security Deposit	146.45
Normative Interest on Consumer Security Deposit @ 9.15%	13.37
Difference Considered towards Non Tariff Income	5.67

### Table 66: Interest on Consumer Security Deposit (Rs. Cr)

3.144 The Commission has included the difference between normative income earned on consumer security deposit and interest paid to consumers as Non tariff Income for FY 2007-08 as per the MYT Regulations.

# **Carrying Cost**

- 3.145 The Commission in its Tariff Order for FY 2009-10 had considered the carrying cost @ 9%.
- 3.146 NDPL appealed against the Order of the Commission in Hon'ble ATE on carrying cost considered by the Commission.
- 3.147 The Hon'ble ATE in its Order dated July 30, 2010 on appeal no 153 of 2009 filed by NDPL has observed as follows:

"the fixation of 9% carrying cost, in our view, is not appropriate. Therefore, the State Commission is hereby directed to reconsider the rate of carrying cost at the prevailing market rate and the carrying cost also to be allowed in the debt/ equity of 70:30"



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- 3.148 The Commission has decided to go in appeal against the Hon'ble ATE Order on allowing carrying cost in the debt/ equity of 70:30. The Commission therefore has not implemented the Judgement of the Hon'ble ATE in this regard.
- 3.149 The Commission during the technical validation session with the Petitioner inquired about the details of the loan taken by the Petitioner for funding of the gap. The officials of the Petitioners informed the Commission that it will not be possible for them to identify the loans taken specifically for funding of revenue gap. Whatever loan Petitioner has taken in any year, part of it was utilised towards capital expenditure and part of it towards funding of the revenue gap. However, the Petitioner through its letter dated August 1, 2011 revised its stand and submitted that Loans for working capital and revenue gap are not identifiable separately till FY 2009-10, but loan taken for capital expenditure can be identified separately.
- 3.150 The Commission through its letter dated July 26, 2011 directed the Petitioner to submit the year-wise average interest rate incurred by the Petitioner for FY 2007-08, FY 2008-09 and FY 2009-10.
- 3.151 The Petitioner in its letter dated August 1, 2011 has submitted weighted average rate of interest for loan taken for working capital and funding of uncovered gap as follows:

Table 67: Interest Rate						

Particulars	FY	FY	FY
	2007-08	2008-09	2009-10
Weighted Average Interest Rate	10.20%	10.51%	9.68%

- 3.152 The Commission observed that the Petitioner has considered interest rate applicable for cash credit in this computation. The Commission is of the view that Cash Credit facility is for the Working Capital funding only and cannot be treated as loan taken for funding of the uncovered gap. The Petitioner also in its letter dated June 24, 2011 has considered Cash Credit for meeting working capital requirement.
- 3.153 The effective weighted average rate of interest for loan taken for funding of uncovered gap after removing cash credit from the loan details submitted by the Petitioner and which is considered as interest rate applicable for funding of the uncovered gap, is shown below:

Table	68:	Interest	Rate

Particulars	FY	FY	FY
	2007-08	2008-09	2009-10
Weighted Average Interest Rate	9.15%	10.17%	8.53%

3.154 Year-wise carrying cost considered by the Commission is shown below:

### Table 69: Carrying Cost considered by the Commission

Particulars	FY	FY	FY
	2007-08	2008-09	2009-10
Carrying Cost	9.15%	10.17%	8.53%



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# Net Impact of True Up for FY 2007-08

- 3.155 The Commission in MYT Order dated February 23, 2008 had approved opening revenue gap for FY 2007-08 as 138.94 Cr. In review Order dated September 22, 2009, opening revenue gap for FY 2007-08 was revised to 154.59 Cr. The Commission in this Order has approved additional Rs 1.75 Cr towards opening revenue gap of FY 2007-08. Thus the opening revenue gap for Petitioner as on FY 2007-08 is 156.34 Cr.
- 3.156 The Commission in Tariff Order dated May 28, 2009 had approved revenue gap for FY 2007-08 as Rs 183.72 Cr. The Commission in this Order has implemented the Order of the Hon'ble ATE, which has resulted in increase in the revenue gap for FY 2007-08.
- 3.157 The net impact of true up for past period (till FY 2007-08) as approved in this Order is shown below:

Particulars	FY 2007-08
Opening Gap	156.34
Revenue Gap for FY 2007-08 approved in Tariff Order dated May 28, 2009	183.79
Change in Depreciation	-5.82
Increase in Power Purchase Cost on account of non consideration of rebate	35.94
Reduction in ARR on account of Increase in Non Tariff Income due to inclusion of rebate on Power Purchase	-35.94
Increase in ARR on account of reduction in Non Tariff Income due to non-consideration of doubtful debt written back	0.17
Increase in ARR on account of reduction in Non Tariff Income due to non-consideration of interest income	3.06
Increase in ARR on account of reduction in Non Tariff Income due to financing cost of principal of LPSC	7.37
Reduction in ARR on account of Increase in Non Tariff Income due to Interest on Consumer Security Deposit	-5.67
Increase in A&G Expenses on account of revision of inflation index	0.15
Increase in Employee Expenses on account of revision of inflation index	0.67
Increase in Return On Capital Employed and Supply Margin	8.42
Decrease in Employee Expenses due to Increase in Employee Expense Capitalisation	-0.07
Reduction in ARR on account of reduction of CISF expenses allowed under new initiative in FY 2007-08	-1.87
Interest Charges De-capitalized	4.52
Total	351.06
Carrying Cost (in %)	9.15%
Carrying Cost ( In Rs Cr)	23.21
Closing Revenue Gap for FY 2007-08	374.27

Table 70: Net impact of Past True up approved by the Commission (Rs Cr)



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# **True Up for FY 2008-09**

## **Energy Sales**

## **Petitioner's Submission**

3.158 The Petitioner has submitted total sales of 5161 MU for FY 2008-09 in its True up petition as against 5118.88 MU approved by the Commission in the MYT Order. Later, through its letter dated 10 March, 2010, the Petitioner submitted a revised version of Form 2.1 (a) for FY 2008-09 extracted from its billing data base, according to which the energy sales for FY 2008-09 were 5179.93 MU.

## **Commission's Analysis**

- 3.159 The Commission analysed category-wise quarterly sales data submitted by the Petitioner for each quarter of FY 2008-09 (under Form 2.1(a)). NDPL did not submit the sales data for fourth quarter of FY 2008-09 at the end of fourth quarter to the Commission.
- 3.160 The Petitioner was, therefore, directed to submit fourth quarter category wise sales for FY 2008-09, which was complied with by the Petitioner.
- 3.161 The Commission directed the Petitioner to submit billing data base for FY 2008-09 to validate the Form 2.1(a) submitted by the Petitioner. The Petitioner through its letter dated March 10, 2010 submitted the revised Form 2.1(a) for FY 2008-09 extracted from its billing database which differed from the sales figures submitted in the True-Up petition. As per the revised Form 2.1(a) submitted by the Petitioner, the energy sales for FY 2008-09 was 5179.93 MU.
- 3.162 The Petitioner also submitted its billing database for FY 2008-09 on March 11, 2010.
- 3.163 During the validation session, the Commission inquired about the methodology adopted by the Petitioner to record sales against cases of enforcement. The Petitioner informed the Commission that MU recorded as sales against cases of enforcement were derived by dividing the total payment received against enforcement cases by average billing rate for the year. The Commission was surprised to note the methodology adopted by the Petitioner. As per Electricity Act, in all cases of enforcement/theft, energy has to billed at twice the rate of the normal tariff. Ideally, the Petitioner should have divided the total payment received against enforcement cases by two times of average billing rate for the year to arrive at MU recorded as sales.
- 3.164 In Form 2.1 (a) for FY 2008-09, the Petitioner has shown sales against enforcement as 37.61 MU by dividing the total payment received against enforcement cases by average billing rate for the year. The Commission has revised this figure and approve sales against enforcement as 18.80 MU.
- 3.165 The Commission therefore, for truing up of sales, has considered the revised sales figures submitted by the Petitioner for FY 2008-09, other than the enforcement where



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Commission reduced it by 18.80 MU and approves the same for true up. The category-wise trued up sales for FY 2008-09 as approved by the Commission now are shown below:

Category	Approved in the MYT Order	Petitioner's Original Submission	Petitioner's Revised Submission	Now Approved
Domestic	2017.82	2091.31	2105.89	2105.89
Non-Domestic	1135.32	992.05	996.95	996.95
Industrial	1656.43	1766.82	1772.00	1772.00
Agriculture & Mushroom	8.46	27.51	24.89	24.89
Public Lighting	84.64	66.42	67.00	67.00
Railway Traction	50.00	47.99	47.99	47.99
DMRC	115.00	75.69	75.69	75.69
Others	51.21	93.37	89.52	70.72
Total	5118.88	5161.16	5179.93	5161.12

### Table 71: Trued up Energy Sales for FY 2008-09 (MU)

## AT&C Losses

### **Petitioner's Submission**

- 3.166 The Petitioner has submitted that it has achieved the AT&C loss level of 14.82% for FY 2008-09 as against the target AT&C loss level of 20.35% prescribed in the MYT Order.
- 3.167 The Petitioner has submitted its computation for AT&C loss level of 14.82% achieved during FY 2008-09 as summarised below:

S. No	Particulars	Units	FY 2008-09	Remarks
А	Units Consumed at NDPL Periphery for NDPL Consumers	MU	6325.30	
В	Units Billed	MU	5161.16	
С	Amount Billed	Rs Cr	2440.17	
D	Distribution Loss	%	18.40%	(1 - B/A)
E	Amount Collected	Rs Cr	2547.50	
F	Collection Efficiency	%	104.39%	F = E/C
G	Units Realized	MU	5388.11	$G = (B \times F)$
Е	AT&C Loss Level	%	14.82%	E = 1 - (G/A)

### Table 72: AT&C loss for FY 2008-09 as submitted by the Petitioner

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



Particulars	Petitioner's Submission
Opening Debtors as on 1 April 2008	256.61
Add:	
Sale	2467.87
LPSC	14.12
DVB Arrears	
Govt.	24.52
DVB Arrears	5.33
Difference in subsidy billed and collected	10.05
Total	2778.50
Less:	
Doubtful Debts	(5.50)
Closing Debtors as on 31.03.08	236.50
Total Collection	2547.50

Table 73: Reconciliation of Collection as submitted by the Petitioner

3.169 The Petitioner has claimed a total benefit of Rs. 165.48 Cr (as computed in Table 74) on account of overachievement of 5.53% in AT&C loss reduction during FY 2008-09.

Table 74: Computation of Overachievement Incentive as submitted by the Petitioner

Particulars	Units	Target Level X	Actual Y
A. AT&C Losses	%	20.35%	14.82%
B. Over Achievement/ (Under Achievement)	%		5.53%
C. Energy Input	MU	6325.30	
D. Units Realized	MU	5038.10	5387.73
E. Average Billing Rate	Rs/unit	4.728	4.728
F. Amount Realized	Rs Cr	2382.01	2547.50
G. Total benefit on account overachievement beyond Target level (Y - X)	Rs Cr	165.48	
Profit Sharing between NDPL and Contingency Reserve			
H. Benefit on account of over achievement from minimum AT&C loss reduction level (20.35%) and 15%	Rs Cr	160.00	
I. Benefit on account of over achievement of AT&C loss reduction beyond 15% i.e. 15% and 14.82%	Rs Cr	5.48	
J. Benefits to be retained by the Petitioner (50% up to 15% and 100% beyond 15%)	Rs Cr	85.48	
K. Benefits to be utilized to meet Revenue Gap (G - J)	Rs Cr	80.00	
L. Total Revenue available towards ARR for FY 2008-09 including E Tax (F - J)	Rs Cr	2462.01	
M. Less: LPSC Considered as Other Income	Rs Cr	14.12	
N. Less: Commission on DVB arrears considered as	Rs Cr	1.07	



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Particulars	Units	Target Level X	Actual Y
Other Income			
O. E Tax	Rs Cr	107.04	
P. Revenue available for Expenses (L - M)	Rs Cr	2,339.78	

Note: Due to extreme accumulated Revenue Gap at the end of FY 2008-09, no profit remains which can be transferred to the contingency reserve account.

## **Commission's Analysis**

- 3.170 The Commission considered all the documents and views recorded in the file pertaining to the preparation of draft Tariff Order for FY 2010-11 in 2010 in respect of truing-up for AT&C losses during FY 2008-09 and decided by majority to accept the following logic, reasoning and basis given in the Order. However some reworking of figures has been done in view of fresh inputs from SLDC as well as the Commission's decision.
- 3.171 As per the MYT Order, the Commission has considered 6.73% reduction in AT&C losses (23.73% in FY 2006-07 to 17.00% in FY 2010-11) for the Control Period. The Commission has further observed in the MYT Order:

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

- (a) First year of the Control Period: The Petitioner shall be eligible for an incentive if the AT&C loss reduction in the first year of the Control Period is above 25%. Any under recovery in the revenue realised, if the AT&C loss reduction in the first year of the Control Period is below 20%, shall be to the account of the Petitioner. The Petitioner shall not be eligible for any incentive or penalty if the AT&C loss reduction in the first year of the Control Period is between 20% and 25%.
- (b) Second year of the Control Period: The Petitioner shall be eligible for an incentive if the cumulative value of loss reduction in that year and in the previous year is over 50%. Any under recovery in the revenue realised, if the AT&C loss reduction in the second year of the Control Period is below 20% and that the cumulative value of loss reduction in that year and in the previous year is below 45%, shall be to the account of the Petitioner. The Petitioner shall not be eligible for any incentive or penalty if the cumulative AT&C loss reduction in the first and second year of the Control Period is between 45% and 50%.



- (c) Third year of the Control Period: The Petitioner shall be eligible for an incentive if the cumulative value of loss reduction in that year and in the previous two years is over 75%. Any under recovery in the revenue realised, if the AT&C loss reduction in the third year of the Control Period is below 20% and that the cumulative value of loss reduction in that year and in the previous two years is below 70%, shall be to the account of the Petitioner. The Petitioner shall not be eligible for any incentive or penalty if the cumulative AT&C loss reduction in the first, second and third year of the Control Period is between 70% and 75%.
- (d) Last year of the Control Period: The Petitioner shall be eligible for an incentive if the cumulative value of loss reduction at the end of the Control Period is over 100%. Any under recovery in the revenue realised, if the AT&C loss reduction in the last year of the Control Period is below 20% and that the cumulative value of loss reduction at the end of the Control Period is below 100%, shall be to the account of the Petitioner.. The Petitioner shall not be eligible for any incentive or penalty if the cumulative AT&C loss reduction at the end of the Control Period is 100%."
- 3.172 A comparison of the AT&C loss level specified in the MYT Order and the actual AT&C loss level claimed by the Petitioner during FY 2008-09 is mentioned below:

Particulars	Approved in the MYT Order	Petitioner's Submission
AT&C Loss Target	20.35%	14.82%

- 3.173 The Commission analysed category-wise quarterly sales data submitted by the Petitioner for each quarter of FY 2008-09 (under Form 2.1(a)). NDPL did not submit the sales data for fourth quarter of FY 2008-09 at the end of fourth quarter to the Commission.
- 3.174 The Petitioner was, therefore, directed to submit fourth quarter category wise sales for FY 2008-09, which was complied with by the Petitioner.
- 3.175 In order to conduct the prudence check to verify the reliability of data contained in Form 2.1(a), the Petitioner was directed to produce month-wise billing and collection details (category-wise) and daily collection register for the FY 2008-09.
- 3.176 During the course of validation exercise on March 4, 2010, Petitioner's officials submitted the daily collection register for FY 2008-09 and agreed to submit the billing database for FY 2008-09. During the validation session, Petitioner's officials also mentioned that the billing data base for FY 2008-09 may not give the same information contained in form 2.1(a) as the billing software is dynamic and several entries might have been changed for FY 2008-09 since the generation of Form 2.1(a). However, the Petitioner officials also submitted that they will provide explanation for such variances, if any.



- 3.177 The Petitioner through its letter dated March 10, 2010 submitted a revised version of Form 2.1(a) for FY 2008-09 extracted from its billing data base. The Petitioner also submitted its billing database for FY 2008-09 on March 11, 2010. As per the revised Form 2.1(a), the energy sales for FY 2008-09 were 5179.93 MU and energy billed was Rs 2447.42 Cr.
- 3.178 The Commission gave an opportunity to the Petitioner to establish its claim on AT&C loss reduction and directed the Petitioner to show the relevant back up data with respect to energy billed (in MU and Rs Cr) and revenue collected (in Rs Cr) for FY 2008-09 through its letter dated March 22, 2010.
- 3.179 For the purposes of this validation, the Petitioner was required to bring evidence to substantiate Form 2.1(a) and also to bring evidence in support of the entries which have gone into calculation of AT&C loss levels. The Petitioner was particularly requested to bring evidence in respect of theft calculation data as well as the proof for the revenue collected. The Petitioner was also directed to bring all such evidences which it wants to rely upon with a view to substantiate the AT&C loss levels calculations. Specific request was made to the Petitioner to bring source data for verifying the authenticity/credibility of the evidence being relied upon.
- 3.180 As a follow-up to the decision of the Commission to afford another opportunity to the Petitioner, technical validation session was held on April 2, 2010. In the technical validation session, senior officers of the Petitioner were present.
- 3.181 The important observations during the technical validation session are as under:
  - (a) In the validation session, the Petitioner was directed to substantiate the data earlier submitted in the form number 2.1 (a) for the full year on random basis with the corresponding live data on their server. The figures tallied.
  - (b) The Petitioner was also directed to validate their daily collection on sample basis from their bank statement. In this regard they provided data & validation for 15 May 2008 from their bank statement and cash collection entry in their record in excel file was done. The figures tallied.
  - (c) Total Revenue collection during the year was also verified.
- 3.182 During the validation session, the Commission inquired about the methodology adopted by the Petitioner to record sales against cases of enforcement. The Petitioner informed the Commission that MU recorded as sales against cases of enforcement were derived by dividing the total payment received against enforcement cases by average billing rate for the year. The Commission was surprised to note the methodology adopted by the Petitioner. As per Electricity Act, in all cases of enforcement/theft, energy has to bill at twice the rate of the normal tariff. Ideally, the Petitioner should have divided the total payment received against enforcement cases by two times of average billing rate for the year to arrive at MU recorded as sales.
- 3.183 In Form 2.1 (a) for FY 2008-09, the Petitioner has shown sales against enforcement as 37.61 MU by dividing the total payment received against enforcement cases by



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average billing rate for the year. The Commission has revised this figure and approve sales against enforcement as 18.80 MU.

- 3.184 During the analysis of the collection efficiency, the Commission observed that for computation of collection efficiency, the Petitioner has included DVB arrears collected directly by DPCL from the Government bodies.
- 3.185 As per the provisions of the Transfer Scheme, DVB arrears related to retail consumers are collected by the Petitioner, of which 20% is retained as incentive by the Petitioner for the services extended towards collection of past dues as per the Delhi Electricity Reform (Transfer Scheme) Rules, 2001 dated 20 November, 2001. The Transfer Scheme also mentions that for past dues till 31 March, 2002 from the Municipal Corporation of Delhi, Corporates and institutions owned and/or controlled by the GoNCTD, DPCL is free to recover this amount from an alternative arrangement instead of arranging its recovery through the DISCOMs.
- 3.186 The Commission further noticed that although there are no efforts undertaken by the Petitioner for recovery of Governmental dues to DPCL, the Petitioner has included this amount in computing its collection efficiency.
- 3.187 Clause 4.7 of the MYT Regulations provides that

"The revenue realization from arrears relating to the DVB period, electricity dues and late payment surcharge shall be included for the computation of collection efficiency."

- 3.188 The Commission indicated that the critical parameter for inclusion of any amount in computing collection efficiency is 'realization'. Considering the fact that the amount of Government dues are not 'realized' by the Petitioner and they are not routed through its books of accounts, the Commission holds that Government dues on account of DVB arrears, which are realized directly by DPCL, should not be considered for computing the collection efficiency.
- 3.189 Therefore, the Commission holds the view that the DVB arrears collected by the Petitioner and appearing in the audited books of the Petitioner should only be considered for the purpose of computing collection efficiency and the DVB arrears which are directly collected by DPCL should not form a part of the computation of collection efficiency of the Petitioner.
- 3.190 The Commission also observes that while calculating the AT&C losses achievement for FY 2008-09, the Petitioner had considered the gross LPSC collected as revenue collected. Thus, any benefit on account of overachievement in AT&C loss is being calculated on gross LPSC amount. However, as financing of LPSC is allowed as a cost, the consumer is getting benefit of net LPSC while computing the Non tariff Income (which is subtracted from the ARR of the Petitioner). As consumers are not getting benefit of gross LPSC, it will be prudent for the Commission to consider the LPSC net of expenses (net LPSC has been considered in total revenue available towards expenses of the Petitioner) while considering collection in the AT&C loss. As the Commission has approved Rs 7.45 Cr towards the financing cost of LPSC for FY



2009-10, the Commission has subtracted this from the revenue collected while calculating the AT&C losses.

3.191 The revenue collection approved and considered as Rs 2515.53 Cr while computing AT&C losses as shown below:

Particulars	Now Approved
Opening Debtors as on 01.04.08	256.61
Add:	
Sale	2467.87
Net LPSC	6.67
DVB Arrears – Non Government	5.33
Difference in subsidy billed and collected	10.05
Total	2746.53
Less:	
Doubtful Debts	(5.50)
Closing Debtors as on 31.03.08	236.50
Total Collection	2515.53

Table 76: Reconciliation of Collection as approved by the Commission

- 3.192 For verification of the energy input, the Commission directed State Load Dispatch Centre (SLDC) to submit the energy input to the Petitioner during FY 2008-09. SLDC through its letter dated 28 July, 2011 submitted to the Commission that total energy input to NDPL for FY 2008-09 was 6369.90 MU, which was higher 6325 MU shown by the Petitioner. SLDC also informed the Commission that 6369.90 MU includes 44.60 MU adjustments done in FY 2009-10 in the energy billed on account of change in CT/PT ratio in Rohtak and Rewari line for FY 2008-09. SLDC also informed the Commission that it has billed additional 1.49 MU to NDPL for FY 2007-08 on account of change in CT/PT ratio in Rewari Line. Since the Commission has already trued up AT&C loss for FY 2007-08, the Commission has considered additional 1.49 MU for FY 2007-08 in the energy input for FY 2008-09. Thus Commission approves energy input for FY 2008-09 as 6371.39 MU for calculation of AT&C loss. However, for calculation of power purchase cost, the additional MU 46.09 (44.60 + 1.49) will be considered in FY 2009-10 only i.e. the year when the bill was raised.
- 3.193 Based on the above, the Commission approves the AT&C loss level for FY 2008-09 as shown below:

S. No	Particulars	Units	Now Approved	Remarks
А	Units Consumed at NDPL Periphery for NDPL Consumers	MU	6371.39	
В	Units Billed	MU	5161.12	
С	Amount Billed	Rs Cr	2447.42	
D	Distribution Loss	%	19.00%	(1 – B/A)
Е	Amount Collected	Rs Cr	2515.53	

### Table 77: AT&C loss for FY 2008-09 as approved by the Commission



(Sunita Yadav)

**Distribution Loss** 

**Collection Efficiency** 

proved

19.00%

102.78%

S. No	Particulars	Units	Now Approved	Remarks
F	Collection Efficiency	%	102.78%	F = E/C
G	Units Realized	MU	5304.75	$G = (B \times F)$
Е	AT&C Loss Level	%	16.74%	E = 1 - (G/A)

3.194 The AT&C loss level approved by the Commission for FY 2008-09 is summarised below:

Particulars	Approved in the MYT Order	Petitioner's Submission	Now Approv	
AT&C Loss	20.35%	14.82%	16.74%	

19.75%

99.25%

Table 78: AT&C loss for FY 2008-09

3.195 The approved AT&C loss of 16.74% is lower than the target AT&C loss level of 20.35% for the Petitioner as specified in the MYT Order. As per clause 4.8 of the MYT Regulations,

"profits arising from achieving loss level better than specified in the loss reduction trajectory shall be equally shared between the Licensee and Contingency Reserve".

18.40%

104.39%

3.196 Accordingly, the incentive on account of the overachievement in the AT&C loss levels achieved by the Petitioner for FY 2008-09 is as summarised below:

Particulars	Units	Target Level X	Actual Y
A. AT&C Losses	%	20.35%	16.74%
B. Over Achievement/ (Under Achievement)	%		3.61%
C. Energy Input	MU	6,371.39	
<b>D.</b> Units Realized	MU	5,074.81	5,304.75
E. Average Billing Rate	Rs/unit	4.74	4.74
F. Amount Realized	Rs Cr	2,406.49	2,515.53
<b>G.</b> Total benefit on account overachievement beyond Target level (Y-X)	Rs Cr	119.04	
H. CISF / Security Expenses	Rs Cr	3.31	
<b>I.</b> Net benefit available for sharing between consumer and NDPL (H-I)	Rs Cr 105.73		5.73
Profit Sharing between NDPL and Contingency Reserve			
<b>J.</b> Benefits to be retained by the Petitioner (50%)	Rs Cr	52.87	
<b>K.</b> Benefits to be Transferred to Contingency Reserve (G-J)	Rs Cr	52.87	
L. Total Revenue available towards ARR for FY	Rs Cr	2,40	6.49

Table 79: Computation of Overachievement Incentive approved by the Commission



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Particulars	Units	Target Level X	Actual Y
2008-09 including E Tax (F – G)			
M. Less: Net LPSC Considered as Other Income	Rs Cr	Cr 6.67	
<b>N.</b> Less: Commission on DVB arrears considered as Other Income	Rs Cr	1.07	
O. Less: E Tax	Rs Cr 107.04		)4
P. Revenue available for Expenses (L-M-N-O)	Rs Cr	2,291.71	

3.197 Hence, the total revenue available towards ARR for FY 2008-09 has been computed by the Commission to be Rs. 2291.71 Cr after considering transferring of Rs 52.87 Cr to contingency reserve.

## **Power Purchase Quantum**

## **Petitioner's Submission**

- 3.198 Against the actual sales of 5179.93 MU during FY 2008-09, the Petitioner has claimed a net power purchase requirement of 6325.30 MU based on their reported distribution loss level of 18.40% for FY 2008-09.
- 3.199 The Petitioner has submitted that the gross power purchase quantum for FY 2008-09 was 7436.18 MU. Further, the Petitioner has provided the details of 804 MU of surplus energy sold/banked.
- 3.200 After deducting the inter-state (PGCIL) of 200.36 MU and intra-state (DTL) transmission loss of 106.48 MU, the Petitioner has submitted a net power purchase quantum of 6325.30 MU for FY 2008-09.

Source	Approved in the MYT Order	Petitioner's Submission
Gross Power Purchase Quantum	7670.35	7436.18
Power Sold To Other Sources	1012.06	804.04
Net Power Purchase	6658.29	6632.15
Transmission Losses:		
Inter-State Transmission Losses	207.06	200.36
Intra-State Transmission Losses	72.72	106.48
Total Transmission Losses	279.78	306.84
Net Power Available after Transmission Losses	6378.51	6325.30

Table 80: Power Purchase Quantum for FY 2008-09 as claimed by the Petitioner (in MU)

## **Commission's Analysis**

3.201 The Commission, in its MYT Order, had approved net power purchase quantum of 6378.51 MU from all sources including central sector generating stations, inter-state bilateral, intra-state power and Delhi generating stations for FY 2008-09.



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- 3.202 It is observed that the actual power purchase quantum for the Petitioner was lower than quantum approved by the Commission due to lower AT&C and T&D losses. This is in spite of an increase in actual energy demand in the Petitioner's distribution area vis-à-vis the demand considered by the Commission in the MYT Order, and higher transmission losses than approved in the MYT Order. In the MYT Order, the Commission had approved energy sales of 5118 MU for FY 2008-09 across all categories of consumers in the distribution area of the Petitioner vis-à-vis actual energy sales of 5180 MU. The transmission losses estimated by the Commission in its MYT Order were 279.78 MU against actual transmission losses of 306.84 MU.
- 3.203 The Commission through its letter dated February 26, 2010 directed the Petitioner to submit month wise station wise power purchase details along with the bills which was complied with by the Petitioner.
- 3.204 The Commission has reviewed the month wise station wise power purchase details submitted by the Petitioner and cross verified the same with the Monthly Regional Energy Accounts for FY 2008-09. The Commission approves the net power purchase of 6325.30 MU in the True-Up of FY 2008-09, as summarised below:

Source	Approved in the MYT Order	Petitioner's Submission	Now Approved
Gross Power Purchase Quantum	7670.35	7436.18	7436.18
Power Sold To Other Sources	1012.06	804.04	804.04
Net Power Purchase	6658.29	6632.15	6632.15
Transmission Losses			
Inter-State Transmission Losses	207.06	200.36	200.36
Intra-State Transmission Losses	72.72	106.48	106.48
Total Transmission Losses	279.78	306.84	306.84
Net Power Available after Transmission Losses	6378.51	6325.30	6325.30
Add: Adjustment for CT/PT			46.09
Net Power Purchase Quantum			6371.39

### Table 81: Trued-up Power Purchase Quantum for FY 2008-09 (in MU)

## **Power Purchase Cost**

# **Petitioner's Submission**

- 3.205 The Petitioner has submitted gross power purchase cost of Rs. 2057.66 Cr. against the gross power purchase quantum of 7436.18 MU in FY 2008-09 from all sources including Intra-state, Bilateral and UI. From the gross power purchase cost, the revenue realized of Rs. 402.35 Cr on account of sale of surplus energy through bilateral, intra-state and UI has been deducted.
- 3.206 Further, the Petitioner has claimed total transmission charges of Rs. 150.62 Cr for the total power purchased during FY 2008-09.



3.207 Considering the above power purchase and transmission cost, the Petitioner has claimed total power purchase cost of Rs. 1805.92 Cr during FY 2008-09 for True-Up.

Table 82. Power Purchase	Cost for FY 2008-09 as claime	d by the Petitioner (in Rs Cr)
Table 02. Tower Turchase	2000-07 as claimed	u by me i chuonei (m Ks Ci)

Source	Approved in the MYT Order	Petitioner's Submission
Gross Power Purchase Cost	1892.03	2057.66
Power Sold To Other Sources	286.41	402.35
Net Power Purchase Cost	1605.62	1655.31
Transmission Charges		
Inter-State Transmission Charges	55.93	103.12
Intra-State Transmission Charges	44.81	47.50
Total Transmission Charges	100.74	150.62
Net Power Purchase Cost including Transmission Charges	1706.36	1805.92

## **Commission's Analysis**

- 3.208 The Commission, in its MYT Order had approved total power purchase cost (including transmission charges) of Rs. 1706.36 Cr as against Rs. 1805.92 Cr claimed by the Petitioner for FY 2008-09. The increase in power purchase cost claimed by the Petitioner against the cost approved by the Commission in MYT Order is primarily on account of increase in quantum of units purchased and increase in the variable cost on account of escalation in fuel prices during FY 2008-09.
- 3.209 The Commission through letter dated 26 February, 2010 directed the Petitioner to submit month wise station wise power purchase cost for FY 2008-09 which was duly complied with by the Petitioner. The Commission has verified the station wise month wise power purchase cost shown by the Petitioner with the bills received by the Petitioner on sample basis. The Commission approves the total power purchase cost for FY 2008-09 at Rs. 1805.92 Cr after verification of power purchase bills for FY 2008-09 as mentioned below:

Source	Approved in the MYT Order	Petitioner's Submission	Now Approved	
Gross Power Purchase Cost	1892.03	2057.66	2057.66	
Power Sold To Other Sources	286.41	402.35	402.35	
Net Power Purchase Cost	1605.62	1655.31	1655.31	
Transmission Charges				
Inter-State Transmission Charges	55.93	103.12	103.12	
Intra-State Transmission Charges	44.81	47.50	47.50	
Total Transmission Charges	100.74	150.62	150.62	
Net Power Purchase Cost including Transmission Charges	1706.36	1805.92	1805.92	

### Table 83: Trued-up Power Purchase Cost for FY 2008-09 (in Rs Cr)



3.210 The power purchase cost of 46.09 MU energy for FY 2007-08 and FY 2008-09 has been included in power purchase cost of FY 2009-10 as SLDC has raised bill for this power in FY 2009-10.

# **Review of Controllable Parameters**

## **Petitioner's Submission**

3.211 As per Section 11.2 and Section 8.8 of the MYT Regulations, the Petitioner is required to submit information as a part of annual review on actual performance to assess the performance vis-à-vis the targets approved by the Hon'ble Commission. Therefore, the Petitioner in its petition has restricted itself to expenses for FY 2008-09 for controllable factors as approved by the Commission in MYT Order.

## **Commission's Analysis**

- 3.212 As per Clause 4.7 of the MYT Regulations, the Commission has specified targets for controllable parameters which inter alia include Operation & Maintenance expenditure (comprising employee expenses, repair & maintenance expenses, administration & general expenses and other miscellaneous expenses, viz. audit fee, rent, legal fees etc.), Return on Capital Employed and depreciation.
- 3.213 Furthermore, as per Clause 4.16 (b), for controllable parameters, any surplus or deficit on account of O&M expenses shall be to the account of the Licensee and shall not be trued up in the ARR; and, depreciation and ROCE shall be trued up at the end of the Control Period.
- 3.214 The Commission has analysed the Controllable components in the subsequent paragraphs.

# **Employee Expenses**

- 3.215 The Commission has observed that as per the MYT Regulations, employee expense is classified as a controllable expense. In the MYT Order, permissible employee expense has been provided for each year of the Control Period as per the methodology prescribed in the MYT Regulations. While approving the employee expenses for each year of the Control Period, the Commission had considered actual employee cost incurred in the base year as per audited accounts and the expected scenario in the future years of the Control Period was also considered.
- 3.216 Clause 8.8 of the MYT Regulations under the heading "Review during the Control Period" of the MYT Regulations states,

"The distribution licensee shall submit information as a part of annual review on actual performance to assess its performance vis-à-vis performance targets approved by the Commission at the beginning of the Control Period".

3.217 In the following sections, the Commission has analysed the submission of the Petitioner on Employee Expense.



## **Correction for Inflation Index based on Actual Figures**

## **Petitioner's Submission**

3.218 The Petitioner in its petition has submitted that as per MYT Regulation 5.4(c)

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

- 3.219 In the MYT Order, the Commission has considered inflation factors (CPI & WPI) for FY 2001-02 to FY 2005-06 instead of FY 2002-03 to FY 2006-07 which are the immediately preceding five years for the MYT Control Period as required by MYT Regulation as the figures for FY 2006-07 were not available.
- 3.220 The Commission has projected the inflation factors (CPI & WPI) for FY 2007-08 onwards based on the previous trends for the period FY 2001-02 to FY 2005-06. As the figures are available on the website of Labourbureau (www.labourbureau.nic.in) and Office of the Economic Adviser (www. eaindustry.nic.in) for CPI and WPI respectively, for the preceding five years of each year of the MYT Period, the same be trued up based on the actual inflation numbers.
- 3.221 The Petitioner has claimed additional Rs 8.55 Cr towards employee expenses for FY 2009-10 on account of this.

## **Commission's Analysis**

3.222 The Commission has already factored in the impact of revision of inflation index in accordance with the judgement of the Hon'ble ATE as detailed in Para 3.105- 3.112 of this Order.

# Increase in Salary for FRSR Structure employees

# **Petitioner's Submission**

- 3.223 The Petitioner has submitted that that service conditions of erstwhile DVB employees (FRSR employees) are governed by rules of GoNCTD, hence NDPL has no control over it and if NDPL is required to pay any monetary benefit to erstwhile DVB employees as per Government rules and requested the Commission to allow all actual salary expenses of FRSR structure employees for the whole MYT Control Period in addition to impact of 6<sup>th</sup> Pay Commission. The Petitioner has submitted that the implementation of increase allowed by the Government for the FRSR employees has resulted an additional expenditure of Rs 3.35 Cr in FY 2007-08 and Rs 6.81 Cr in FY 2008-09.
- 3.224 The Petitioner further submitted that apart from increase in salary, there have been certain other monetary and non monetary benefits given to FRSR structure employees either pursuant to some specific circulars/ rules or practice followed by Delhi Transco Ltd (DTL) forcible made compulsory on NDPL where NDPL had no choice to accept the same because the practice followed by DTL are either have support/clarification



from government or interpretation of various rules from the department. NDPL has paid Rs 1.97 Cr towards LTA expenses for FRSR employees which are over and above the amount included in the base year figures of FY 2006-07.

3.225 The Petitioner has submitted the cost incurred in till FY 2008-09 on account of increase in salary for FRSR Structure employees as Rs. 12.12 Cr.

## **Commission's Analysis**

3.226 As per the MYT Regulation,

"4.7 The Commission shall set targets for each year of the Control Period for the items or parameters that are deemed to be "controllable" and which include;

....

(d) **Operation and Maintenance Expenditure which includes employee expenses**, repairs and maintenance expenses, administration and general expenses and other miscellaneous expenses viz. audit fees, rents, legal fees etc;

,,,

# *"True Up*

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

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

(b)For controllable parameters,

- (i) Any surplus or deficit on account of O&M expenses shall be to the account of the Licensee and shall not be trued up in ARR; and
- 3.227 O&M Expenses which include Employee Expenses are controllable parameter. The Commission was aware of fact that service conditions of erstwhile DVB employees (FRSR employees) are governed by rules of GoNCTD at the time of framing MYT Regulations and it had considered Employee Expenses as a controllable item and linked it with indexation factor. There is no change in the methodology of determination of salary for FRSR Structure employees after notification of the MYT Regulations.
- 3.228 Therefore the Commission rejects the submission of the Petitioner.

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### Impact of Sixth Pay Commission to non-DVB employees

### **Petitioner's Submission**

- 3.229 The Petitioner has submitted that an approximate 40% increase has been allowed to the employees covered under FRSR structure on account of Sixth Pay Commission recommendations. Further, in order to maintain relative parity in salary of both the structure employees i.e. employees under FRSR structure and employees under CTC based structure, the Petitioner allowed a 10% additional interim increase over and above the regular increment to employees under CTC based structure against a provisional 20% increase provided to employees under FRSR structure.
- 3.230 The Petitioner has also submitted that against the balance 20% increase allowed to employees under FRSR structure, an increase in line with previous increase is being considered for employees under CTC based structure.
- 3.231 The Petitioner has submitted the cost incurred in till FY 2008-09 on account of increase provided to non DVB employees as Rs. 4.29 Cr.

### **Commission's Analysis**

- 3.232 The Commission has observed that as per the MYT Regulations, employee expense is classified as a controllable expense. In the MYT Order, permissible employee expense has been provided for each year of the Control Period as per the methodology prescribed in the MYT Regulations. The Commission in its MYT Order had allowed a provisional increase in salary due to the Sixth Pay Commission **only for the DVB employees**. While approving the employee expenses for each year of the Control Period, the Commission had undertaken a thorough analysis and prudence check of the actual employee cost incurred in the base year as per audited accounts and the expected scenario in the future years of the Control Period was also considered.
- 3.233 The Commission therefore rejects the Petitioner's claim for impact of the Sixth Pay Commission recommendations on non-DVB employees.

## Impact of Sixth Pay Commission to DVB employees

- 3.234 The Commission has already factored in the implementation of Sixth Pay Commission's recommendation as detailed in Para 3.113- 3.128 of this Tariff Order.
- 3.235 The total amount claimed under employee expenses by the Petitioner for FY 2008-09 is shown below:

Particulars	Approved in the MYT Order	Petitioner's Submission
Employee Expenses Net of Capitalization	153.54	153.54
Correction on account of Inflation Factor	0.00	2.04
Increase in FRSR Salary	0.00	12.12
Impact of Sixth Pay Commission for Non	0.00	4.29

### Table 84: Employee expenses proposed for FY 2008-09 (Rs. Cr)



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Particulars	Approved in the MYT Order	Petitioner's Submission
DVB Employees		
Employee expenses	153.54	171.99

3.236 The Commission approves the employee expenses for FY 2008-09 as shown in the table below.

Table 85: Employee Expenses approved by the Commission for FY 2008-09 (Rs. Cr)

Particulars	Approved in the MYT Order	Petitioner's Submission	Now Approved
Gross Employee Expenses (Without Impact of Sixth Pay Commission)	166.47	166 47	143.22
Add: Interim Relief Paid on account of Sixth Pay Commission	166.47 166.47		17.90
Less: Capitalisation	21.45	21.45	21.65
Add: SVRS Pension	8.53	8.53	8.53
Net Employee Expenses	153.54	153.54	148.00
Add: Correction on account of Inflation Factor	0.00	2.04	0.00*
Add: Increase in FRSR Salary	0.00	12.12	0.00
Add: Impact of Sixth Pay Commission for Non DVB Employees	0.00	4.29	0.00
Employee expenses	153.54	171.99	153.54

\*Already considered while approving 143.22 Cr as Gross Employee Cost

## Administration & General (A&G) Expenses

## Petitioner's Submission

- 3.237 The Petitioner has submitted A&G expenses of the same amount as approved in the MYT Order, viz. 32.21 Cr in its true up petition.
- 3.238 The Petitioner has also claimed additional Rs 0.44 Cr towards A&G expenses for FY 2009-10 on account of correction of inflation factor.

### Table 86: A&G Expenses proposed for FY 2008-09 (Rs. Cr)

Particulars	Approved in the MYT Order	Petitioner's Submission
A&G Expenses	32.21	32.21
Correction for Inflation Factor		0.44



## **Commission's Analysis**

- 3.239 As per Clause 4.16(b)(i) of the MYT Regulations, A&G expense is a controllable parameter and any surplus or deficit on account of actual A&G expense compared to as approved in the MYT Order for the Control Period shall be to the account of the Petitioner and shall not be trued up.
- 3.240 The Commission has already factored in the impact of revision of inflation index in accordance with the judgement of the Hon'ble ATE as detailed in Para 3.105 3.112 of this Order.
- 3.241 The Commission approves the A&G Expenses for FY 2008-09 as shown in the table below:

Particulars	Approved in the MYT Order	Petitioner's Submission	Now Approved
A&G Expenses	32.21	32.21	32.53
Correction of Inflation Factor		0.44	0.00*

### Table 87: A&G Expenses approved for FY 2008-09 (Rs. Cr)

\*Already considered while approving 32.53 Cr as A&G Expenses

## Repairs & Maintenance (R&M) Expenses

### **Petitioner's Submission**

3.242 The Petitioner has submitted R&M expenses of the same amount as approved in the MYT Order, viz. 72.16 Cr.

Table 88: R&M	I expenses proposed	l for FY 2008-09 (Rs	. Cr)
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Particulars	Approved in the MYT Order	Petitioner's Submission
R&M Expenses	72.16	72.16

## **Commission's Analysis**

- 3.243 The Commission had approved an amount of Rs. 72.16 Cr towards R&M expense for FY 2008-09 based on the methodology prescribed in the MYT Regulations.
- 3.244 As per Clause 4.16(b) (i) of the MYT Regulations, R&M Expense is a controllable parameter and any surplus or deficit on account of actual R&M Expense compared to as approved in the MYT Order for the Control Period shall be to the account of the Petitioner and shall not be trued up.
- 3.245 Accordingly, the R&M expenses are approved at the same level as provided in the MYT Order for FY 2008-09 as shown below:



Table 89: Approved R&M Expenses (Rs. Cr)

Particulars	Approved in the MYT Order	Petitioner's Submission	Now Approved
R&M Expenses	72.16	72.16	72.16

### **Operation & Maintenance Expense**

### **Petitioner's Submission**

3.246 Operation & Maintenance (O&M) Expense is the sum total of expenses incurred towards employee, A&G and R&M expenses. After considering expense capitalization of Rs. 21.45 Cr and efficiency factor at 2%, the Petitioner has claimed net O&M expenses of Rs. 252.75 Cr which is the same as approved in the MYT Order. In addition to this, the Petitioner has claimed Rs 2.47 Cr on account of correction of inflation factor, Rs 12.12 Cr on account of increase in FRSR salary and Rs 4.29 Cr on account of impact of Sixth pay Commission to Non-DVB employees.

### **Commission's Analysis**

3.247 The Commission has approved the revised employee cost considering the impact of revision of inflation index and revision of salary due to recommendation of Sixth pay Commission. The Commission has also revised A&G Expenses on account of revision of inflation index. The O&M Expenses approved by the Commission is shown below:

Particulars	Approved in the MYT Order	Petitioner's Submission	Now Approved
Employee Expenses (Net of capitalisation)	153.54	153.54	148.00
A&G Expenses	32.21	32.21	32.53
R&M Expenses	72.16	72.16	72.16
Gross O&M Expenses	257.91	257.91	252.69
Efficiency improvement	2%	2%	2%
Net O&M Expenses	252.75	252.75	247.63
Additional O&M Expenses	-	18.88	-
Correction on account of Inflation Factor		2.47	0.00*
Increase in FRSR Salary		12.12	0.00
Impact of Sixth pay Commission		4.29	0.00

### Table 90: Amount approved by the Commission (Rs. Cr)

\*Considered while approving A&G Expenses and Employee Expenses



## **Review of Capital Expenditure & Capitalisation**

## **Capital Expenditure Review**

3.248 Clause 4.14 of Delhi Electricity Regulatory Commission (Terms & Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2007 stipulates as under:

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

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

Table 91: Ca	pex proposed	by NDPL	(Rs. Cr)
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Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	Total
CAPEX proposed by NDPL	333	188	169	160	850

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

Table 92: Revised capex proposed b	by NDPL (Rs. Cr)
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Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	Total
CAPEX proposed by NDPL	325	225	200	200	950

- 3.251 The Petitioner highlighted that against the opening CWIP Rs. 273 Cr in FY 2008-09, the closing CWIP was Rs. 210 Cr as on 31 March, 2008. The Petitioner further explained that more and more schemes are being commissioned during the same year thereby reducing the quantum of CWIP.
- 3.252 As per the Petitioner's submission, the capital expenditure claimed to have been incurred in FY 2008-09 is Rs. 274 Cr. During FY 2009-10, the capital expenditure claimed till 28 February 2010 is Rs. 272.5 Cr.
- 3.253 The Commission is of the opinion that instead of capital expenditure incurred, the actual capitalisation figures are more important since they have more relevance in terms of the assets actually having been put to use.
- 3.254 The Commission emphasizes that capital expenditure and capitalization would need to be seen separately. The capital expenditure has to be reviewed with respect to schemes proposed by the distribution licensees, approval by the Commission and actual expenditure against approved schemes (along with the opening and closing levels of CWIP). This would indicate the progress in implementation of approved schemes. The year wise capitalisation has to be compared to the capitalisation approved in the MYT Order for the impact in the fixed cost in Tariff.
- 3.255 NDPL has claimed following capitalization for the MYT period so far:



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Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Approved in MYT Order	520.00	400.00	225.00	200.00
Actual as per DISCOM	264.46	337.2	350.0 (Proj)	-

Table 93: Capitalisation claimed by NDPL (Rs Cr)

- 3.256 As per the submission of NDPL schemes amounting to Rs. 122 Cr have to be preponed from FY 2010-11 to FY 2009-10. Apart from that, there is an additional Capex requirement of Rs. 189 Cr owing to new schemes not anticipated during preparation of the MYT Capex Plan.
- 3.257 The Commission emphasizes that as per the MYT Regulations, any shortfall in Capital Expenditure with respect to the figures considered in the MYT Order shall be considered at the end of the MYT Control Period. Necessary adjustment to various parameters relating to capital expenditure at the end of the Control Period will be done along with carrying cost.

## **Review of Depreciation**

## **Petitioner's Submission**

3.258 The Petitioner has submitted depreciation of the same amount as approved in the MYT Order, viz. 103.36 Cr.

Particulars	Approved in the MYT Order	Petitioner's Submission	
Depreciation	103.36	103.36	

# **Commission's Analysis**

- 3.259 The Commission had approved an amount of Rs. 103.36 Cr for FY 2008-09 in the MYT Order.
- 3.260 As per Clause 4.7 of the MYT Regulations, Depreciation is a controllable parameter, for which the Commission has set targets for each year of the Control Period. Further, as per Clause 4.14 of the MYT Regulations, adjustment to depreciation and return on capital employed for the actual investment vis-à-vis approved capital investment shall be done at the end of the Control Period. Clause 4.16(b) (ii) of the MYT Regulations also provide for true up of Depreciation and ROCE at the end of the Control Period.
- 3.261 The Commission in the Para 3.37 3.52 of this Order has approved revised depreciation for each year of the Control Period after correcting mistakes in the MYT Order. The depreciation now approved for FY 2008-09 is shown below:



Particulars	Approved in the	Petitioner's	Now
	MYT Order	Submission	Approved
Depreciation	103.36	103.36	93.15

### **Review of Return on Capital Employed (RoCE)**

### **Petitioner's Submission**

3.262 The Petitioner has submitted RoCE of the same amount as approved in the MYT Order, viz. Rs. 213.32 Cr.

### **Commission's Analysis**

- 3.263 The Commission had approved an amount of Rs. 1831.42 Cr towards RRB and Rs. 213.32 Cr towards Return on Capital Employed and Supply Margin in the MYT Order for the FY 2008-09.
- 3.264 As per Clause 4.7 of the MYT Regulations, RoCE is a controllable parameter, for which the Commission has set targets for each year of the Control Period. Further, as per Clause 4.14 of the MYT Regulations, adjustment to depreciation and return on capital employed for the actual investment vis-à-vis approved capital investment shall be done at the end of the Control Period. Clause 4.16(b) (ii) of the MYT Regulations also provide for true up of Depreciation and ROCE at the end of the Control Period.
- 3.265 The Commission in the Para 3.53 3.61 of this Order has approved revised RRB for each year of the Control Period after correcting mistakes in the MYT Order. The Commission has also revised WACC and RoCE for each year of the Control Period in the Para 3.62 3.74. The revised RoCE approved for FY 2008-09 approved by the Commission is shown below:

Particulars	Approved in the MYT Order	Petitioner's Submission	Now Approved
RoCE	200.31	200.31	198.70
Supply Margin	13.00	13.00	11.58
RoCE with Supply Margin	213.32	213.32	210.29

Table 96: Now Approved RoCE for FY 2008-09 (Rs. Cr)

## **Consumers' Security Deposits**

- 3.266 The Commission observed that the Petitioner has not accounted for consumers' security deposits in its petition. The Commission through its letter dated January 29, 2010 directed the Petitioner to submit details of consumer security deposit for FY 2008-09.
- 3.267 The Petitioner through its letter dated February 8, 2010 informed the Commission that it has invested the consumers' security deposits in the business. The details of the Consumer security deposit for FY 2008-09 given by the Petitioner is shown below:



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Table 97: Consumer Security Deposit (Rs. Cr)

Particulars	FY 2008-09
Opening Consumer Security Deposit	161.21
Closing Consumer Security Deposit	197.32
Average Consumer Security Deposit	179.27

3.268 As per the MYT Regulations,

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

- 3.269 The Commission through its letter dated February 26, 2010 directed the Petitioner to submit the information on interest paid the Petitioner on consumers' security deposits during FY 2008-09.
- 3.270 The Petitioner through its letter dated February 26, 2010 informed the Commission that it had paid interest amount of Rs 11.96 Cr to consumers in FY 2008-09. The Commission observes that Rs 11.96 Cr includes Rs 1.98 Cr on account of interest on consumer security deposit paid for pre privatization period received by DVB which is yet to be transferred to the Petitioner. The Commission in its Order dated April 23, 2007 has already decided that this amount is to be paid by DPCL and therefore cannot be allowed.
- 3.271 As the Petitioner has invested the consumers' security deposits in the business, the Commission is treating the same as funding the revenue gap for the Petitioner. The Commission has allowed carrying cost @ 10.17% for FY 2008-09 for the Petitioner therefore the Commission has assumed consumer security deposit earning @ 10.17% during FY 2008-09. The normative income on consumer security deposit calculated by the Commission is shown below:

Particulars	FY 2008-09
Interest on Consumer Security Deposit paid	9.98
Average Consumer Security Deposit	179.27
Normative Interest on Consumer Security Deposit @ 10.17%	18.23
Difference Considered towards Non Tariff Income	8.25

Table 98: Interest on	<b>Consumer Security</b>	Deposit (Rs. Cr)
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3.272 The Commission has included the difference between normative income earned on consumer security deposit and interest paid to consumers as Non tariff Income as per MYT Regulations.



## Income Tax

## **Petitioner's Submission**

3.273 The Petitioner has submitted that it incurred Rs. 27 Cr (Rs 25.32 Cr Income Tax and Rs 1.68 Cr Fringe Benefit Tax) in FY 2008-09 on taxes, while it was allowed only Rs. 15 Cr in the MYT Order. Hence it has directed for the difference of Rs. 12 Cr to be trued up.

Table 99: Income tax expense claimed by the Petitioner
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Particulars (Rs. Cr)	Approved in MYT Order	Petitioner's Submission
Income tax	15.0	27.0

## **Commission's Analysis**

- 3.274 As per the copy of Income Tax Return submitted by the Petitioner, the income tax for FY 2008-09 has been indicated as Rs 24.97 Cr against the payment of Rs 25.38 Cr made by the Petitioner. The Fringe Benefit Tax paid was Rs 1.62 Cr. The Petitioner has not received any tax refund during the FY 2008-09.
- 3.275 As per the MYT Regulations,

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

3.276 The Commission therefore has decided not to allow the fringe benefit tax of Rs. 1.62 Cr to be passed on to consumers and approves an amount of Rs. 24.97 Cr towards Income Tax as per the Income Tax Return filed by the Petitioner.

Particulars (Rs. Cr)	Approved in	Petitioner's	Now
	MYT Order	Submission	Approved
Income tax	15.0	27.0	24.97

### Table 100: Income tax expense approved

## **Other Expenses**

# Petitioner's Submission

- 3.277 NDPL has submitted the following additional expenses for consideration in ARR. computation. These include expenses on:
  - (a) Fees paid for new power purchase arrangements: NDPL has submitted that in the year 2008-09, it incurred an expenditure of Rs. 0.60 Cr as fees for new power purchase arrangements.



- (b) Trading fees: NDPL became a member of the Indian Energy Exchange, Power Exchange, for which it incurred an expense of Rs. 0.28 Cr including Rs. 0.26 Cr as the membership fee.
- (c) CISF Forces: NDPL has submitted due to additional deployment of CISF forces as well as the impact of the Sixth Pay Commission, it incurred Rs. 3.31 Cr as expenditure on CISF forces.
- (d) Credit Rating: The licensee has submitted that it incurred Rs. 0.11 Cr in 2008-09 towards the credit rating of its fund and non-fund based facilities.
- (e) DVB arrears: NDPL has submitted that DVB arrears of Rs. 29.85 Cr were collected in 2008-09 which are considered as part of the revenue realized. The licensee has submitted that expenses on this account be included in its ARR as the same are to be paid to DPCL. NDPL has requested to include Rs. 28.78 Cr in ARR calculations, which is equivalent to 80% of DVB arrears (non Government) collected and 100% of DVB arrears (Government) collected.
- (f) Power Banking: The Petitioner has submitted that the net impact of cumulative carrying cost for power banking for FY 2007-08 and FY 2008-09 works out to Rs 10.77 Cr up to March 2009. The Petitioner has requested that the total claim for both years amounting to Rs. 10.77 Cr be allowed in the true up for FY 2008-09.
- 3.278 These proposed costs are shown below along with the costs approved earlier in the MYT Order.

	FY 2008-09		
Other Expenses	Approved in the MYT Order	Petitioner's Submission	
New initiatives:			
Expenses related to power arrangement		0.60	
Fee for Power Exchange		0.28	
Credit rating		0.11	
Total cost for new initiatives		0.99	
CISF expenditure		3.31	
DVB arrears		28.78	
Financing cost of power banking		10.77	
Total Cost of Other Expenses	0.00	43.85	

Table 101: Additional expenses claimed for FY 2008-09 (Rs Cr)

### **Commission's Analysis**

- 3.279 In the MYT Order, the Commission had not made any provision for additional expenses apart from the expenses considered and approved in the Order.
- 3.280 Since the Commission has not considered DVB arrears of the Government as part of the Petitioner's revenue, the Commission has not considered these DVB arrears of the



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Government of Rs 24.52 Cr in the Petitioner's expenses either. The Commission allows the Petitioner the remaining Rs 4.26 Cr (80% of Rs 5.33 Cr) as expenses incurred on DVB arrears.

- 3.281 With respect to CISF expenditure, the Commission observes that the deployment of CISF force has helped in reduction of AT&C losses. Therefore, any cost on account of CISF should be first adjusted towards the benefit on account of overachievement in reduction of AT&C losses, if any, before passing on any benefit to consumer or the distribution licensee. Therefore, the Commission has not considered any cost on account of CISF expenditure as new initiative.
- 3.282 The Commission allows additional expenses on account of expenses related to power arrangement, fee for power exchange and expenses on obtaining a credit rating to the extent requested in the this petition as the Petitioner has incurred these expenses for the first time during the MYT Control Period and hence these were not included in the O&M Expenses for the base year while preparing the MYT Order.
- 3.283 With respect to the financing cost of power banking, the Commission believes that banking contracts are revenue neutral. The electricity industry follows a practice wherein in case of forward/ advance banking, the utility demands additional power @ 4% to be returned and in case of backward banking, the utility has to return 4% extra power. The Commission considers the power banked in advance by the utility as energy sale at Rs 4 per unit because if it does not consider it then it would be burdening present consumers for future consumption, which the Commission deems inappropriate. The utility will be receiving the power banked along with 4% additional power in the next year. The Commission considers total power received as power purchase @ Rs 4 per unit. This allows the utility power purchase cost on additional 4% power received by them @ Rs 4 per unit, which is equivalent to the financing cost of this banking.
- 3.284 During the technical validation session with the Petitioner's officials on March 5, 2010, the Commission directed the Petitioner to submit details of forward banking and reverse banking timeslot wise and explain why it is claiming financing cost of banking since the Petitioner should be receiving additional power for forward banking done by it. However, the Petitioner did not submit any information to the Commission. The Commission, therefore, is not allowing the Petitioner any additional working capital financing cost for power banking.
- 3.285 The total amount approved by the Commission under the head 'Other Expenses' is Rs. 5.25 Cr.

	FY 2008-09		
Other Expenses	Approved in the MYT Order	Petitioner's Submission	Now approved
New initiatives:			
Expenses related to power arrangement		0.60	0.60
Fee for Power Exchange		0.28	0.28

### Table 102: Other expenses approved for FY 2008-09 (Rs Cr)



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	FY 2008-09		
Other Expenses	Approved in the MYT Order	Petitioner's Submission	Now approved
Credit rating		0.11	0.11
Total cost for new initiatives		0.99	0.99
CISF expenditure		3.31	0.00
DVB arrears		28.78	4.26
Financing cost of power banking		10.77	-
Total Cost of Other Expenses	0.00	43.85	5.25

# Non Tariff Income (NTI)

## **Petitioner's Submission**

3.286 The Petitioner in its True up Petition has considered Non Tariff Income of Rs. 62.27 Cr for FY 2008-09, while the amount approved in the MYT Order was Rs. 29.10 Cr. The Non Tariff Income proposed includes 50% of the rebate earned by the Petitioner on account of timely payment of power purchase bills.

Particulars	Petitioner's Submission
Non Tariff Income as per audited accounts	116.39
Less:	
Rebate on power Purchase Cost	17.29
Transfer from capital grants	0.29
Transfer from consumer contribution for capital works	4.92
Provision for doubtful debt	1.10
Interest/Short term capital gain	5.22
Gain on sale/retirement of the fixed asset	4.55
Service Line Charges to be deferred in future years	8.05
Interest on Investment of Contingency Reserve (to be reinvested in reserves)	0.65
Income from Other Business	0.73
Financing Cost of LPSC	9.41
Service Tax on Maintenance charges	1.61
Total Non Tariff Income	62.27

# **Commission's Analysis**

3.287 The Commission in the MYT Order had mentioned that the NTI shall be considered for true up at the end of the Control Period. In light of the MYT Regulations, the Commission re-examined the issue of Non Tariff Income, which shaped the approach



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towards treatment of Non Tariff Income followed by the Commission in the True up Order for FY 2007-08. This approach is described below.

- 3.288 Clause 5.25 of the MYT Regulations states that "The amount received by the licensee on account of Non Tariff Income shall be deducted from the aggregate revenue requirement in calculating the net revenue requirement of such licensee". Clause 5.27 further elaborates that "The net aggregate revenue requirement of the licensee eligible for recovery during each year of the Control Period shall be determined after deducting from the aggregate revenue requirement, the non tariff income and the other income". A joint reading of both the above clauses indicates that NTI being an integral part of the revenue requirement shall be trued up at the end of each year of the Control Period.
- 3.289 As per the MYT Regulations only two sets of parameters are recognized i.e. controllable and uncontrollable. While the uncontrollable parameters include revenue / expenditure on account of sales and power purchase and provide for its annual true up, the controllable parameters include O&M expense, Capex related expenses and RoCE, and does not specifically include Non Tariff Income. Also, the MYT Regulations in regard to controllable expenses specifically provide for true up of Capex related expenditure i.e. RoCE and Depreciation at the end of the Control Period.
- 3.290 The Petitioner has submitted that it has claimed total rebate of 37.26 Cr (net rebate of 34.58 Cr), of which upto 1% rebate was Rs 17.67 Cr, earned on timely payment of power purchase bills. It has also submitted that it has allowed a rebate of 2.68 Cr on sale of power of which 1.34 Cr was upto 1% rebate allowed to purchaser on timely payment power purchase bill by the purchaser.
- 3.291 As detailed in Para 3.94 3.99 in this Order, the Commission has decided to go in appeal against the Hon'ble ATE Order on considering only 1% rebate on power purchase as the Non tariff Income of the Petitioner. The Commission therefore has not implemented the Judgement of the Hon'ble ATE in this regard. The Commission has considered entire rebate earned on power purchase as Non Tariff Income.
- 3.292 The Petitioner had collected late payment surcharge (LPSC) of Rs 14.12 Cr in FY 2008-09 from its Consumers. As the Petitioner charges LPSC @ 18% per annum (1.5% per month), the principle amount on which LPSC has been charged will be 78.44 Cr.
- 3.293 The Commission in its MYT Order dated Feb 23, 2008 had approved funding of working capital @ 9.5% considering SBI PLR of 12.25% prevalent at the time of issuing MYT Order. As prevailing SBI PLR as on April 1, 2008 was 12.25%, the Commission has allowed the financing cost for LPSC @ 9.5%. The financing cost approved by the Commission is shown below:

Particular	FY 2008-09
LPSC Collected (@ 18%)	14.12
Principle amount on which LPSC was charged	78.44

#### Table 104: Funding of LPSC (Rs Cr)



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Particular	FY 2008-09
Interest Rate for funding of Principle of LPSC	9.5%
Interest approved on funding of Principle amount of LPSC	7.45

- 3.294 The Commission has also included the difference in interest paid and earned on Consumer Security Deposit for FY 2008-09 in the non tariff income of the Petitioner as explained in Para 3.266 3.272 of this Order.
- 3.295 The Commission observes that the Petitioner has not included Rs 5.52 Cr of interest / short term capital gains in the non tariff income. The Petitioner has submitted that these investments have been made out of surpluses which have arisen due to the Commission's disallowing the plough back of entire Regulatory ROE, which is retained in the business and Capex Loans which are not fully utilized from the date of disbursement to utilization of full amount.
- 3.296 The Commission further observes that the Petitioner has shown earnings of Rs 1.69 Cr from other than License Business (Rs 1.02 Cr from Consultancy and Rs 0.67 Cr from utilization of NDPL's assets). It has also submitted expenses of Rs 0.16 Cr towards Consultancy Business. The Petitioner has proposed to share 0.97 Cr with the consumers against the total earnings of Rs 1.69 Cr, and subtracted Rs 0.73 Cr from the non tariff income.
- 3.297 As per the Commission's Other Business Regulation, the Petitioner is required to submit audited accounts of the other business to the Commission. The Commission through its letter dated January 7, 2010 directed the Petitioner to submit the audited accounts of the other businesses of the Petitioner along with the methodology considered for apportioning the expenses.
- 3.298 The Petitioner through its letter dated January 18, 2010 submitted that it does not maintain audited accounts for the other businesses.
- 3.299 In absence of the audited accounts, the Commission can not recognised expenses of the other businesses of the Petitioner. The Commission has considered 80% of the income from other business i.e. Rs 1.36 Cr as the non tariff income.
- 3.300 The Petitioner has subtracted Rs 1.61 Cr from non tariff income on account of Service Tax paid by the Petitioner towards income of Rs 10.04 Cr earner by it on account of Street Light Maintenance Charges from MCD which has not been reimbursed by MCD/PWD.
- 3.301 The Commission believes that non payment of service tax by MCD/ PWD on Service Light Maintenance Charges is a commercial dispute between the Petitioner and MCD/PWD, and burden of this cannot be passed to other consumers. The Commission rejects Petitioner's stand and has not subtracted Rs 1.61 Cr from non tariff income.
- 3.302 Hence, the Commission has approved the amount of Non Tariff Income as summarised below:



Particulars	Now Approved
Non Tariff Income as per audited accounts	116.39
Less:	
Transfer from capital grants	0.29
Transfer from consumer contribution for capital works	4.92
Provision for doubtful debts/ advances	1.10
Gain on sale/retirement of fixed Assets (net)	4.55
Service Line Charges to be deferred in future years	8.05
Interest on Investment of Contingency Reserve	0.65
Interest/Short term capital gain	5.22
Income from Other Business (20%)	0.34
Financing Cost of LPSC	7.45
Add:	
Income from normative interest of Consumer Security Deposits for FY 2008-09	8.25
Total Non Tariff Income	92.07

 Table 105: Trued-up Non Tariff Income approved (Rs. Cr)

## **Annual Revenue Requirement for FY 2008-09**

3.303 The Commission approves the Annual Revenue Requirement (ARR) after incorporating the above changes at Rs 2295.14 Cr for FY 2008-09. The ARR approved in the MYT Order, as claimed by the Petitioner and the trued up ARR is summarised below:

	FY 2008-09		
Aggregate Revenue Requirement	Approved in the MYT Order	Petitioner's Submission	Now Approved
Power purchase cost	1706.36	1805.92	1805.92
O&M expenses	252.75	252.75	247.63
Correction of inflation factor	0.00	2.47	0.00**
Increase in FRSR salary	0.00	12.12	0.00
Impact of Sixth Pay Commission	0.00	4.29	0.00
Depreciation	103.36	103.36	93.15
ROCE including supply margin allowed	213.32	213.32	210.29
Interest Expense de-capitalized (FY 2007-08)	0.00	4.52	0.00
Income Tax expenses	15.00	27.00	24.97
Other Expenses	0.00	43.85	5.25
Less:			
Other income including Non Tariff Income	29.10	62.26	92.07
Interest/other expenses capitalized	9.71	-	-

Table 106: Aggregate Revenue Requirement (Rs Cr)



		FY 2008-09	
Aggregate Revenue Requirement	Approved in the MYT Order	Petitioner's Submission	Now Approved
Aggregate Revenue Requirement	2254.05	2407.35	2295.14

## **Revenue available towards ARR**

#### **Petitioner's Submission**

3.304 The Petitioner has submitted the net revenue from sale of power to be considered towards annual revenue requirement as Rs. 2339.78 Cr after adjustment towards electricity tax and the Petitioner's share of over-achievement incentive. The Petitioner has retained the consumers' share in the incentive on account of overachievement in AT&C loss reduction for meeting the revenue gap for FY 2008-09 as summarized below:

Particulars	Petitioner's Submission
Total Amount Realized	2547.50
Less: Benefit to be retained by the Petitioner	85.48
Total Revenue available towards ARR	2462.01
Less: LPSC Considered as Other Income	14.12
Less: Commission on DVB arrears considered as Other Income	1.07
Less: E Tax	107.04
Revenue available for Expenses	2339.78

#### Table 107: Revenue Details submitted by the Petitioner

#### **Commission's Analysis**

- 3.305 The Petitioner has offered the consumer share of the overachievement towards meeting the revenue gap for FY 2008-09. The Commission has accepted the Petitioner's requested and not transferred the consumer's share in benefit on account of reduction of AT&C losses better than the target given to the Petitioner. Thus, there will be no addition to the contingency reserve during FY 2008-09.
- 3.306 The Commission has computed the total revenue of the Petitioner available towards ARR to be Rs 2344.58 Cr, as detailed below:

#### Table 108: Revenue available towards ARR approved for FY 2008-09

Particulars	Now Approved
Total Amount Realized (Including Net LPSC)	2515.53
Less: CISF Expenses	3.31
Less: Benefit to be retained by the Petitioner	52.87
Total Revenue available towards ARR	2459.36
Less: LPSC Considered as Other Income	6.67



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Particulars	Now Approved
Less: Commission on DVB arrears considered as Other Income	1.07
Less: E Tax	107.04
Revenue available for Expenses	2344.58

# **Contingency Reserve**

- 3.307 As per the provisions of MYT Regulations, a Contingency Reserve is to be maintained for Tariff Stability and passing the benefits derived to the consumers under the MYT Framework. The Commission had in its MYT Order directed the Petitioner to transfer the amount allowed as contribution to the Contingency reserve in the past that is Rs. 20.37 Cr to the MYT Contingency Reserve. The Commission had also directed the Petitioner to maintain separate accounts in its books and reflect the balance in the MYT Contingency Reserve Account in the Balance Sheet. The Petitioner shall use the amount for investing in safe securities and earning returns based on the market conditions. However, the Petitioner is refrained from using the money for speculative purposes. The Commission also directed the Petitioner to transfer the refunds received from DTL, IP Station, Rajghat Power House, GTPS and PPCL as specified in the MYT Order of the respective Companies/ licenses to the Contingency Reserve.
- 3.308 The Commission in its True up Order for FY 2007-08, directed the Petitioner to transfer Rs 25.20 Cr on account of overachievement in AT&C loss reduction in Contingency reserve.
- 3.309 The Commission in this Order has revised the amount to be transferred to contingency reserve for FY 2007-08 as Rs 20.24 Cr.
- 3.310 The Revised contingency reserve for FY 2007-08 is shown below:

Particular	Rs Cr
Opening Level of Contingency Reserve for FY 2007-08	20.37
Additional to Contingency Reserve during FY 2007-08	20.24
Add: Interest during the year on the opening balance	1.41
Add: Interest during the year on addition to Contingency Reserve	0.71
Closing level of Contingency Reserve for FY 2008-09	42.53

Table 109:	Contingency	Reserve	(Rs.	Cr)
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- 3.311 The Petitioner has offered the consumer share of the overachievement towards meeting the revenue gap for FY 2008-09. The Commission has accepted the Petitioner's requested and not transferred the consumer's share in benefit on account of reduction of AT&C losses better than the target given to the Petitioner. Thus, there will be no addition to the contingency reserve during FY 2008-09.
- 3.312 The opening level of Contingency Reserve along with the interest thereon is summarized below:



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#### Table 110: Contingency Reserve (Rs. Cr)

Particular	Rs Cr
Opening Level of Contingency Reserve for FY 2008-09	42.53
Add: Interest during the year on the opening balance	2.98
Closing level of Contingency Reserve for FY 2008-09	45.51

# **Revenue (Gap)/ Surplus**

3.313 The revenue (gap)/ surplus for FY 2008-09 as approved in the MYT Order, submitted by the Petitioner and trued up by the Commission is summarised below:

Particulars (Rs. Cr)	Approved in the MYT Order	Petitioner's Submission	Now Approved
ARR for FY 2008-09	2254.05	2407.35	2295.14
Revenue available towards ARR	2461.77	2339.78	2344.58
Revenue (Gap)/ Surplus	207.72	(67.57)	49.44

Table 111: Revenue (Gap)/ Surplus for FY 2008-09 (Rs Cr)

3.314 The treatment of approved revenue surplus for FY 2008-09 of Rs 49.44 Cr has been discussed in Chapter A6.



## A4: TRUE UP FOR FY 2009-10

## Background

- 4.1 The Commission had approved the Aggregate Revenue Requirement (ARR) of NDPL for each year of the Multi Year Tariff Control Period (FY 2007-08 to FY 2010-11) in its Multi Year Tariff Order for NDPL dated 23 February, 2008. The Commission while truing up for FY 2007-08 had revised the Aggregate Revenue Requirement (ARR) of NDPL for FY 2009-10 in its Tariff Order dated May 28, 2009 due to revision of uncontrollable parameters i.e. sales and power purchase. The MYT Regulations provide for truing up of the uncontrollable parameters of the ARR at the end of each year of the Control Period based on the audited accounts and prudence check by the Commission.
- 4.2 NDPL in its petition has sought truing up of the expenditure and revenue for FY 2009-10. In this Chapter, the Commission has analysed the petition of NDPL in accordance with the principles laid down under MYT Regulations.

# **Energy Sales**

### **Petitioner's Submission**

4.3 The Petitioner has submitted total sales of 5800.17 MU for FY 2009-10 in its True up petition as against 5625 MU approved by the Commission in its Order dated May 28, 2009. The Petitioner also submitted auditor certificate for sale of energy which has shown sales as 5797.78 MU.

## **Commission's Analysis**

- 4.4 The Commission analysed category-wise quarterly sales data submitted by the Petitioner for each month of FY 2009-10 (under Form 2.1(a)).
- 4.5 The Commission also directed the Petitioner to verify the sales details submitted in Form 2.1 (a) from their billing data base for FY 2009-10.
- 4.6 During the course of validation exercise on July 15, 2011 Petitioner's officials submitted the daily collection details for FY 2009-10 and verified the billing database for FY 2009-10. During the validation session, Petitioner's officials also mentioned that the billing data base for FY 2009-10 may not give the same information contained in form 2.1(a) as the billing software is dynamic and several entries might have been changed for FY 2009-10 since the generation of Form 2.1(a). However, the Petitioner's officials also submitted that they will provide explanation for such variances, if any.
- 4.7 The billing data for FY 2009-10 was extracted from the billing servers of the NDPL through LAN connectivity. The data extracted from the system were integrated and Form 2.1 (a) for FY 2009-10 was prepared.



- 4.8 The auditor certificate submitted by the Petitioner shows sale of energy as 5797.78 MU, while the Form 2.1 (a) generated from the billing server shown total sales as 5801.33 MU, variation of 3.55 MU. As the billing software is dynamic and several entries might have been changed for FY 2009-10 since the generation of Form 2.1(a), the Commission accepted this minor variation.
- 4.9 During the validation session, the Commission inquired about the methodology adopted by the Petitioner to record sales against cases of enforcement. The Petitioner informed the Commission that MU recorded as sales against cases of enforcement were derived by dividing the total payment received against enforcement cases by average billing rate for the year. The Commission was surprised to note the methodology adopted by the Petitioner. As per Electricity Act, in all cases of enforcement/theft, energy has to bill at twice the rate of the normal tariff. Ideally, the Petitioner should have divided the total payment received against enforcement cases by two times of average billing rate for the year to arrive at MU recorded as sales.
- 4.10 In Form 2.1 (a) for FY 2009-10, the Petitioner has shown sales against enforcement as 45.39 MU by dividing the total payment received against enforcement cases by average billing rate for the year. The Commission has revised this figure and approve sales against enforcement as 22.69 MU.
- 4.11 The Commission therefore, for truing up of sales, has considered the sales figures submitted by the Petitioner through auditor certificate for FY 2009-10 other than the enforcement where Commission reduced it by 22.69 MU, and approves the same for true up. The trued up sales for FY 2009-10 as approved by the Commission now is shown below:

Category	Approved in the Order May 28, 2009	Actuals as per Petitioner's Submission	Auditor Certificate	Trued Up
Domestic	2260	2447		
Non-Domestic	1124	1176		
Industrial	1904	1884		
Agriculture & Mushroom	32	55		
Public Lighting	79	20		
Railway Traction	52	54		
DMRC	101	99		
Others	72	65		
Total	5625	5800	5797.78	5775.08

### Table 112: Trued Up Energy Sales for FY 2009-10 (MU)



# AT&C Losses

### **Petitioner's Submission**

- 4.12 The Petitioner has submitted that it has achieved the AT&C loss level of 14.47% for FY 2009-10 as against the target AT&C loss level of 18.67% prescribed in the MYT Order.
- 4.13 The Petitioner has submitted that the Petitioner has paid for 6955.97 MU in FY 2009-10, which includes 46.09 MU for previous years (1.49 MU for FY 2007-08 and 44.60 MU for FY 2008-09). Thus total energy received for the consumption during the FY 2009-10 is 6909.88 MU (6955.97 – 46.09).
- 4.14 The Petitioner has submitted its computation for AT&C loss level of 14.47% achieved during FY 2009-10 as summarised below:

S. No	Particulars	Units	FY 2009-10	Remarks
А	Units Consumed at NDPL Periphery for NDPL Consumers	MU	6909.88	
В	Units Billed	MU	5800.17	
С	Amount Billed	Rs Cr	2707.92	
D	Distribution Loss	%	16.06%	(1 - B/A)
Е	Amount Collected	Rs Cr	2759.13	
F	Collection Efficiency	%	101.89%	F = E/C
G	Units Realized	MU	5909.85	$G = (B \times F)$
Е	AT&C Loss Level	%	14.47%	E = 1 - (G/A)

#### Table 113: AT&C loss for FY 2009-10 as submitted by the Petitioner

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

### Table 114: Reconciliation of Collection as submitted by the Petitioner

Particulars	Petitioner's Submission
Opening Debtors as on 1 April 2008	236.50
Add:	
Sale	2721.73
LPSC	16.09
DVB Arrears	0.66
Difference in subsidy billed and collected	(7.54)
Total	2967.44
Less:	
Doubtful Debts	(16.03)
Closing Debtors as on 31.03.08	224.34
Total Collection	2759.13

4.16 The Petitioner has claimed a total benefit of Rs. 135.41 Cr (as computed in Table 74) on account of overachievement of 4.18% in AT&C loss reduction during FY 2009-10.



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		Target Level Actual		
Particulars	Units	X	Y	
A. AT&C Losses	%	18.67%	14.47%	
B. Over Achievement/ (Under Achievement)	%		4.18%	
C. Energy Input	MU	6909.88		
D. Units Realized	MU	5619.81	5909.47	
E. Average Billing Rate	Rs/unit	4.6687	4.6687	
F. Amount Realized	Rs Cr	2623.72	2759.13	
G. Total benefit on account overachievement beyond Target level (Y - X)	Rs Cr 135.41		1	
Profit Sharing between NDPL and Contingency Reserve				
H. Benefit on account of over achievement from minimum AT&C loss reduction level (18.67%) and 15%	Rs Cr	118.39		
I. Benefit on account of over achievement of AT&C loss reduction beyond 15% i.e. 15% and 14.47%	Rs Cr	17.02		
J. Benefits to be retained by the Petitioner (50% up to 15% and 100% beyond 15%)	Rs Cr	76.22		
K. Benefits to be utilized to meet Revenue Gap (G - J)	Rs Cr	59.19		
L. Total Revenue available towards ARR for FY 2009-10 including E Tax (F - J)	Rs Cr	Cr 2682.91		
N. E Tax	Rs Cr	117.89		
O. Less: 80% of DVB Arrears	Rs Cr	0.53		
P. Revenue available for Expenses (L - M)	Rs Cr	2,564.49		

### **Commission's Analysis**

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

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

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

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



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or penalty if the AT&C loss reduction in the first year of the Control Period is between 20% and 25%.

- (b) Second year of the Control Period: The Petitioner shall be eligible for an incentive if the cumulative value of loss reduction in that year and in the previous year is over 50%. Any under recovery in the revenue realised, if the AT&C loss reduction in the second year of the Control Period is below 20% and that the cumulative value of loss reduction in that year and in the previous year is below 45%, shall be to the account of the Petitioner. The Petitioner shall not be eligible for any incentive or penalty if the cumulative AT&C loss reduction in the first and second year of the Control Period is between 45% and 50%.
- (c) Third year of the Control Period: The Petitioner shall be eligible for an incentive if the cumulative value of loss reduction in that year and in the previous two years is over 75%. Any under recovery in the revenue realised, if the AT&C loss reduction in the third year of the Control Period is below 20% and that the cumulative value of loss reduction in that year and in the previous two years is below 70%, shall be to the account of the Petitioner. The Petitioner shall not be eligible for any incentive or penalty if the cumulative AT&C loss reduction in the first, second and third year of the Control Period is between 70% and 75%.
- (d) Last year of the Control Period: The Petitioner shall be eligible for an incentive if the cumulative value of loss reduction at the end of the Control Period is over 100%. Any under recovery in the revenue realised, if the AT&C loss reduction in the last year of the Control Period is below 20% and that the cumulative value of loss reduction at the end of the Control Period is below 100%, shall be to the account of the Petitioner.. The Petitioner shall not be eligible for any incentive or penalty if the cumulative AT&C loss reduction at the end of the Control Period is 100%."
- 4.18 A comparison of the AT&C loss level specified in the MYT Order and the actual AT&C loss level claimed by the Petitioner during FY 2009-10 is mentioned below:

Particulars	Approved in the MYT Order	Petitioner's Submission
AT&C Loss Target	18.68%	14.47%

- Table 116: AT&C loss for FY 2009-10 as submitted by the Petitioner
- 4.19 The Commission analysed category-wise monthly sales data submitted by the Petitioner for each month of FY 2009-10 (under Form 2.1(a)).
- 4.20 The Commission gave an opportunity to the Petitioner to establish its claim on AT&C loss reduction and directed the Petitioner to show the relevant back up data with respect to energy billed (in MU and Rs Cr) and revenue collected (in Rs Cr) for FY 2009-10.



- 4.21 For the purposes of this validation, the Petitioner was required to bring evidence to substantiate Form 2.1(a) and also to bring evidence in support of the entries which have gone into calculation of AT&C loss levels. The Petitioner was also directed to bring all such evidences which it wants to rely upon with a view to substantiate the AT&C loss levels calculations. Specific request was made to the Petitioner to bring source data for verifying the authenticity/credibility of the evidence being relied upon.
- 4.22 In order to conduct the prudence check to verify the reliability of data contained in Form 2.1(a), the Petitioner was directed to produce month-wise billing and collection details (category-wise) and daily collection register for the FY 2009-10.
- 4.23 During the course of validation exercise on July 15, 2011 Petitioner's officials submitted the daily collection details for FY 2009-10 and verified the billing database for FY 2009-10. During the validation session, Petitioner's officials also mentioned that the billing data base for FY 2009-10 may not give the same information contained in form 2.1(a) as the billing software is dynamic and several entries might have been changed for FY 2009-10 since the generation of Form 2.1(a). However, the Petitioner's officials also submitted that they will provide explanation for such variances, if any.
- 4.24 The billing data for FY 2009-10 was extracted from the billing servers of the NDPL through LAN connectivity. The data extracted from the system were integrated and Form 2.1 (a) for FY 2009-10 was prepared.
- 4.25 The auditor certificate submitted by the Petitioner shows sale of energy as 5797.78 MU, while the Form 2.1 (a) generated from the billing server shown total sales as 5801.33 MU, variation of 3.55 MU. As the billing software is dynamic and several entries might have been changed for FY 2009-10 since the generation of Form 2.1(a), the Commission accepted this minor variation.
- 4.26 During the validation session, the Commission inquired about the methodology adopted by the Petitioner to record sales against cases of enforcement. The Petitioner informed the Commission that MU recorded as sales against cases of enforcement were derived by dividing the total payment received against enforcement cases by average billing rate for the year. The Commission was surprised to note the methodology adopted by the Petitioner. As per Electricity Act, in all cases of enforcement/theft, energy has to bill at twice the rate of the normal tariff. Ideally, the Petitioner should have divided the total payment received against enforcement cases by two times of average billing rate for the year to arrive at MU recorded as sales.
- 4.27 In Form 2.1 (a) for FY 2009-10, the Petitioner has shown sales against enforcement as 45.39 MU by dividing the total payment received against enforcement cases by average billing rate for the year. The Commission has revised this figure and approve sales against enforcement as 22.69 MU.
- 4.28 The Commission therefore, for truing up of sales, has considered the sales figures submitted by the Petitioner through auditor certificate for FY 2009-10 other than the enforcement where Commission reduced it by 22.69 MU, and approves the same for true up.



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- 4.29 With reference to amount billed, the Commission observed that as per the auditor's certificate submitted by the Petitioner, revenue billed during the FY 2009-10 was Rs 2706.81 Cr against the 2707.92 Cr submitted by the Petitioner in Form 2.1 (a). The Petitioner was able to derive figure of Rs. 2706.80 from its audited account but could not provide any explanation for variance between revenue billed shown in Form 2.1 (a) and auditor certificate/audited accounts. Therefore the Commission for the AT&C loss calculations has assumed amount billed as Rs 2706.81 Cr as shown in the auditor's certificate.
- 4.30 The Petitioner has submitted Rs 2759.13 Cr as revenue collected during FY 2009-10 on sale of electricity.
- 4.31 During the technical validation session, the Petitioner was able to derive Rs 2759.13 Cr from the audited accounts of the Petitioner. The Petitioner was also able to match daily collection details with the bank statements of the Petitioner.
- 4.32 The Commission observes that the revenue collection of Rs 2759.13 Cr includes the total LPSC collected by the Petitioner. However, as financing of LPSC is allowed as a cost to the Petitioner, the consumer is getting benefit of net LPSC while computing the Non tariff Income (which is subtracted from the ARR of the Petitioner). As consumers are not getting benefit of gross LPSC, it will be prudent for the Commission to consider the LPSC net of expenses (net LPSC has been considered in total revenue available towards expenses of the Petitioner) while considering collection in the AT&C loss. As the Commission has approved Rs 8.49 Cr towards the financing cost of LPSC for FY 2009-10, the Commission has subtracted this from the revenue collected while calculating the AT&C losses. Thus revenue collected has been considered as Rs 2750.64 Cr while computing AT&C losses.
- 4.33 The revenue collection approved by the Commission is shown below:

Particulars	Approved
Opening Debtors as on 1 April 2008	236.50
Add:	
Sale	2721.73
Net LPSC	7.60
DVB Arrears	0.66
Difference in subsidy billed and collected	(7.54)
Total	2958.95
Less:	
Doubtful Debts	(16.03)
Closing Debtors as on 31.03.08	224.34
Total Collection	2750.64

Table 117: Reconciliation of Collection as approved by the Commission

4.34 For verification of the energy input, the Commission directed State Load Dispatch Centre (SLDC) to submit the energy input to the Petitioner during FY 2009-10. SLDC through its letter dated July 22, 2011 submitted to the Commission that total energy input to NDPL for FY 2009-10 was 6963.04 MU, which was higher than 6955.97 MU



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shown by the Petitioner. SLDC through its letter dated July 28, 2011 also clarified that this energy included adjustment of 46.09 MU for FY 2007-08 and FY 2008-09.

- 4.35 The Commission directed the Petitioner to explain the reasons for variations from the SLDC figures, to which the Petitioner responded that at the time of finalisation of audited account for FY 2009-10, as the UI accounts for month of March were not issued, it had prepared audited account for FY 2009-10 based upon assumption for UI accounts for March 2009-10. The Petitioner has shown power purchase cost for FY 2009-10 in the audited accounts based upon the above mentioned assumption and impact of actual UI accounts will be considered in the accounts of the next Financial Year i.e. FY 2010-11.
- 4.36 The Commission agrees with the Petitioner's submission on the power purchase cost, however for calculation of AT&C losses, it has considered the actual energy input to the Petitioner as per submission of SLDC. Any additional power purchase cost, over and above recorded in the audited balance sheet for FY 2009-10 will be considered by the Commission while truing up for FY 2010-11 as per the audited accounts for FY 2010-11 as the Petitioner is currently not able to submit the impact of the additional power on power purchase cost.
- 4.37 The energy adjustment for 46.09 MU for FY 2007-08 and FY 2008-09.has been considered by the Commission while truing up AT&C Loss for FY 2008-09 and has been removed from energy input for FY 2009-10.
- 4.38 Based on the above, the Commission approves the AT&C loss level for FY 2009-10 as shown below:

S. No	Particulars	Units	Now Approved	Remarks
A	Units Consumed at NDPL Periphery for NDPL Consumers	MU	6916.94	
В	Units Billed	MU	5775.08	
С	Amount Billed	Rs Cr	2706.81	
D	Distribution Loss	%	16.51%	(1 – B/A)
Е	Amount Collected	Rs Cr	2750.64	
F	Collection Efficiency	%	101.62%	F = E/C
G	Units Realized	MU	5868.60	$\mathbf{G} = (\mathbf{B} \mathbf{x} \mathbf{F})$
Е	AT&C Loss Level	%	15.16%	E = 1 - (G/A)

Table 118: AT&C loss for FY 2009-10 as approved by the Commission

4.39 The AT&C loss level approved by the Commission for FY 2009-10 is summarised below:

<b>Table 119:</b>	AT&C	loss for	FY	2009-10

Particulars	Approved in the MYT Order	Petitioner's Submission	Now Approved
AT&C Loss	18.68%	14.47%	15.16%
Distribution Loss	18.27%	16.06%	16.51%



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Particulars	Approved in the MYT Order	Petitioner's Submission	Now Approved
Collection Efficienc	y 99.50%	101.89%	101.62%

4.40 The approved AT&C loss of 15.16% is lower than the target AT&C loss level of 18.68% for the Petitioner as specified in the MYT Order. As per clause 4.8 of the MYT Regulations,

"profits arising from achieving loss level better than specified in the loss reduction trajectory shall be equally shared between the Licensee and Contingency Reserve".

- 4.41 Deployment of CISF / Security force has helped in reduction of AT&C losses. Therefore, any cost on account of CISF / Security forces should be first adjusted towards the benefit on account of overachievement in reduction of AT&C losses, if any, before passing on any benefit to consumer or the distribution licensee. The Petitioner has submitted expense incurred towards CISF / Security force as Rs 0.97 Cr for FY 2009-10.
- 4.42 Accordingly, the incentive on account of the overachievement in the AT&C loss levels achieved by the Petitioner for FY 2009-10 is as summarised below:

Particulars	Units	Target Level Actual	
raruculars	Units	X	Y
A. AT&C Losses	%	18.68%	15.16%
B. Over Achievement/ (Under Achievement)	%		3.52%
C. Energy Input	MU	6,916.94	6,916.94
<b>D.</b> Units Realized	MU	5,624.86	5868.60
E. Average Billing Rate	Rs/unit	4.69	4.69
F. Amount Realized	Rs Cr	2,636.40	2,750.64
<b>G.</b> Total benefit on account overachievement beyond Target level (X-Y)	Rs Cr	114.24	
H. CISF / Security Expenses	Rs Cr	0.97	
I. Net benefit available for sharing between consumer and NDPL (G-H)	Rs Cr	113.27	
Profit Sharing between NDPL and Contingency Reserve			
<b>J.</b> Benefits to be retained by the Petitioner $(I/2)$	Rs Cr	56.64	
<b>K.</b> Benefits to be Transferred to Contingency Reserve (I/2)	Rs Cr	56.64	
<b>L.</b> Total Revenue available towards ARR for FY 2009-10 including E Tax (F – G)	Rs Cr	2636.40	
M. Less: Net LPSC Considered as Other Income	Rs Cr	7.60	
N. Less: Commission on DVB arrears considered as Other Income	Rs Cr	0.13	

Table 120: Computation of Overachievement Incentive approved by the Commission



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Particulars	Units	Target Level X	Actual Y
O. Less: E Tax	Rs Cr	117.89	
P. Revenue available for Expenses (L-M-N-O)	Rs Cr	2510.78	

4.43 Hence, the total revenue available towards ARR for FY 2009-10 has been computed by the Commission to be Rs. 2510.78 Cr after considering transferring of Rs 56.64 Cr to contingency reserve.

# **Power Purchase Quantum**

## **Petitioner's Submission**

- 4.44 Against the actual sales of 5800.17 MU during FY 2009-10, the Petitioner has claimed a net power purchase requirement of 6909.88 MU based on the actual distribution loss level of 16.06% for FY 2009-10.
- 4.45 The Petitioner has submitted that the gross power purchase quantum for FY 2009-10 was 8118.60 MU. Further, the Petitioner has provided the details of 724.95 MU of surplus energy sold/banked.
- 4.46 After deducting the inter-state (PGCIL) of 326.77 MU and intra-state (DTL) transmission loss of 110.91 MU, the Petitioner has submitted a net power purchase quantum of 6955.97 MU for FY 2009-10.

Source	Approved in Order dated May 28, 2009	Petitioner's Submission
Gross Power Purchase Quantum	8253.85	8118.60
Power Sold To Other Sources	1059.86	724.95
Net Power Purchase	7193.99	7393.65
Transmission Losses:		
Inter-State Transmission Losses	203.9	326.77
Intra-State Transmission Losses	107.69	110.91
Total Transmission Losses	311.59	437.68
Net Power Available after Transmission Losses	6882.4	6955.97

### Table 121: Power Purchase Quantum for FY 2009-10 as claimed by the Petitioner (in MU)

## **Commission's Analysis**

4.47 The Commission, in its Tariff Order dated May 28, 2009, had approved net power purchase quantum of 6882.4 MU from all sources including central sector generating stations, inter-state bilateral, intra-state power and Delhi generating stations for FY 2009-10.



- 4.48 It is observed that the actual power purchase quantum for the Petitioner was higher than quantum approved by the Commission due to higher actual energy demand in the Petitioner's distribution area vis-à-vis the demand considered by the Commission in the MYT Order and higher transmission losses than approved in the Tariff Order.
- 4.49 The Commission directed the Petitioner to submit month wise station wise power purchase details along with the bills which was complied with by the Petitioner.
- 4.50 The Commission has reviewed the month wise station wise power purchase details submitted by the Petitioner and cross verified the same with the Monthly Regional Energy Accounts for FY 2009-10.
- 4.51 The Commission directed State Load Dispatch Centre (SLDC) to submit the energy input to the Petitioner during FY 2009-10. SLDC through its letter dated July 22, 2011 submitted to the Commission that total energy input to NDPL for FY 2009-10 was 6963.04 MU, which was higher 6955.97 MU shown by the Petitioner. SLDC through its letter dated July 28, 2011 also clarified that this energy included adjustment of 46.09 MU for FY 2007-08 and FY 2008-09.
- 4.52 The Commission directed the Petitioner to explain the reasons for variations from the SLDC figures, to which the Petitioner responded that at the time of finalisation of audited account for FY 2009-10, as the UI accounts for month of March were not issued, it had prepared audited account for FY 2009-10 based upon assumption for UI accounts for March 2009-10. The Petitioner has shown power purchase cost for FY 2009-10 in the audited accounts based upon the above mentioned assumption and impact of actual UI accounts will be considered in the accounts of the next Financial Year i.e. FY 2010-11.
- 4.53 The Commission agrees with the Petitioner's submission on the power purchase cost, however for calculation of AT&C losses, it has considered the actual energy input to the Petitioner as per submission of SLDC. Any additional power purchase cost, over and above recorded in the audited balance sheet for FY 2009-10 will be considered by the Commission while truing up for FY 2010-11 as per the audited accounts for FY 2010-11 as the Petitioner is currently not able to submit the impact of the additional power on power purchase cost.
- 4.54 The energy adjustment for 46.09 MU for FY 2007-08 and FY 2008-09.has been considered by the Commission while truing up AT&C Loss for FY 2008-09 and has been removed from energy input for FY 2009-10.Thus Commission approved the net power purchase quantum of 6916.94 MU in the True-Up of FY 2009-10.

# **Power Purchase Cost**

# **Petitioner's Submission**

4.55 The Petitioner has submitted gross power purchase cost of Rs. 2675.23 Cr. against the gross power purchase quantum of 8118.80 MU in FY 2009-10 from all sources including Intra-state, Bilateral and UI. From the gross power purchase cost, the revenue realized of Rs. 298.20 Cr on account of sale of surplus energy through bilateral, intra-state and UI has been deducted.



- 4.56 Further, the Petitioner has claimed total transmission charges of Rs. 181.51 Cr for the total power purchased during FY 2009-10.
- 4.57 Considering the above power purchase and transmission cost, the Petitioner has claimed total power purchase cost of Rs. 2558.54 Cr during FY 2009-10 for True-Up.

Source	Approved in Order dated May 28, 2009	Petitioner's Submission
Gross Power Purchase Cost	2172.40	2675.23
Power Sold To Other Sources	517.15	298.20
Net Power Purchase Cost	1655.25	2377.03
Transmission Charges		
Inter-State Transmission Charges	106.25	124.22
Intra-State Transmission Charges	49.70	57.29
Total Transmission Charges	155.95	181.51
Net Power Purchase Cost including Transmission Charges	1811.21	2558.54

Table 122: Power Purchase Cost for FY 2009-10 as claimed by the Petitioner (in Rs Cr)

### **Commission's Analysis**

- 4.58 The Commission, in its Tariff Order dated May 28, 2009 had approved total power purchase cost (including transmission charges) of Rs. 1811.21 Cr as against Rs. 2558.54 Cr claimed by the Petitioner for FY 2009-10. The increase in power purchase cost claimed by the Petitioner against the cost approved by the Commission in its Order is primarily on account of increase in quantum of units purchased through bilateral sources, increase in per unit rate of bilateral power purchase, lower rate for sale of surplus power and increase in the variable cost on account of escalation in fuel prices during FY 2009-10.
- 4.59 The Commission has verified the station wise month wise power purchase cost shown by the Petitioner with the bills received by the Petitioner on sample basis. The Commission approves the total power purchase cost for FY 2009-10 at Rs. 2588.54 Cr after verification of power purchase bills for FY 2009-10 as mentioned below:

Source	Approved in Order dated May 28, 2009	Petitioner's Submission	Now Approved
Gross Power Purchase Cost	2172.40	2675.23	2675.23
Power Sold To Other Sources	517.15	298.20	298.20
Net Power Purchase Cost	1655.25	2377.03	2377.03
Transmission Charges			
Inter-State Transmission Charges	106.25	124.22	124.22

### Table 123: Trued-up Power Purchase Cost for FY 2009-10 (in Rs Cr)

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Source	Approved in Order dated May 28, 2009	Petitioner's Submission	Now Approved
Intra-State Transmission Charges	49.70	57.29	57.29
Total Transmission Charges	155.95	181.51	181.51
Net Power Purchase Cost including Transmission Charges	1811.21	2558.54	2558.54

4.60 The power purchase cost approved by the Commission includes cost of 46.09 MU energy for FY 2007-08 and FY 2008-09, for which SLDC has raised bill in FY 2009-10.

# **Review of Controllable Parameters**

## **Petitioner's Submission**

4.61 As per Section 11.2 and Section 8.8 of the MYT Regulations, the Petitioner is required to submit information as a part of annual review on actual performance to assess the performance vis-à-vis the targets approved by the Hon'ble Commission. Therefore, the Petitioner in its petition has restricted itself to expenses for FY 2009-10 for controllable factors as approved by the Commission in MYT Order.

## **Commission's Analysis**

- 4.62 As per Clause 4.7 of the MYT Regulations, the Commission has specified targets for controllable parameters which inter alia include Operation & Maintenance expenditure (comprising employee expenses, repair & maintenance expenses, administration & general expenses and other miscellaneous expenses, viz. audit fee, rent, legal fees etc.), Return on Capital Employed and depreciation.
- 4.63 Furthermore, as per Clause 4.16(b), for controllable parameters, any surplus or deficit on account of O&M expenses shall be to the account of the Licensee and shall not be trued up in the ARR; and, depreciation and ROCE shall be trued up at the end of the Control Period.
- 4.64 The Commission has analysed the Controllable components in the subsequent paragraphs.

## **Employee Expenses**

# **Correction for Inflation Index based on Actual Figures**

# Petitioner's Submission

4.65 The Petitioner in its petition has submitted that as per MYT Regulation 5.4(c)

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



- 4.66 In the MYT Order, the Commission has considered inflation factors (CPI & WPI) for FY 2001-02 to FY 2005-06 instead of FY 2002-03 to FY 2006-07 which are the immediately preceding five years for the MYT Control Period as required by MYT Regulation as the figures for FY 2006-07 were not available.
- 4.67 The Commission has projected the inflation factors (CPI & WPI) for FY 2007-08 onwards based on the previous trends for the period FY 2001-02 to FY 2005-06. As the figures are available on the website of Labourbureau (www.labourbureau.nic.in) and Office of the Economic Adviser (www. eaindustry.nic.in) for CPI and WPI respectively, for the preceding five years of each year of the MYT Period, the same be trued up based on the actual inflation numbers.
- 4.68 The Petitioner has claimed additional Rs 8.55 Cr towards employee expenses for FY 2009-10 on account of this.

## **Commission's Analysis**

4.69 The Commission has already factored in the impact of revision of inflation index in accordance with the judgement of the Hon'ble ATE as detailed in Para 3.105 - 3.112 of this Tariff Order.

## Increase in Salary for FRSR Structure employees

## **Petitioner's Submission**

4.70 The Petitioner has submitted that that service conditions of erstwhile DVB employees (FRSR employees) are governed by rules of GoNCTD, hence NDPL has no control over it and if NDPL is required to pay any monetary benefit to erstwhile DVB employees as per Government rules and requested the Commission to allow all actual salary expenses of FRSR structure employees for the whole MYT Control Period in addition to impact of 6<sup>th</sup> Pay Commission. The Petitioner has submitted that the implementation of increase allowed by the Government for the FRSR employees has resulted an additional expenditure of Rs 3.02 Cr in FY 2007-08, Rs 5.68 Cr in FY 2008-09 and Rs 10.29 Cr in FY 2009-10.

# **Commission's Analysis**

4.71 As per the MYT Regulation,

"4.7 The Commission shall set targets for each year of the Control Period for the items or parameters that are deemed to be "controllable" and which include;

....

(d) **Operation and Maintenance Expenditure which includes employee expenses**, repairs and maintenance expenses, administration and general expenses and other miscellaneous expenses viz. audit fees, rents, legal fees etc;

....."



### "True Up

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

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

(b)For controllable parameters,

- (i) Any surplus or deficit on account of O&M expenses shall be to the account of the Licensee and shall not be trued up in ARR; and
- 4.72 O&M Expenses which include Employee Expenses are controllable parameter. The Commission was aware of fact that service conditions of erstwhile DVB employees (FRSR employees) are governed by rules of GoNCTD at the time of framing MYT Regulations and it had considered Employee Expenses as a controllable item and linked it with indexation factor. There is no change in the methodology of determination of salary for FRSR Structure employees after notification of the MYT Regulations.
- 4.73 Therefore the Commission rejects the submission of the Petitioner.

## Impact of Sixth Pay Commission to DVB employees

### **Petitioner's Submission**

- 4.74 The Petitioner has submitted that there is a significant variation in employee costs due to implementation of Sixth Pay Commission recommendations. Against an estimated increase of 10% estimated and factored by the Hon'ble Commission in the MYT Order dated 23rd February 2008, the actual increase has been in the range of 40%-55%, thereby significantly increasing the employee cost. The additional impact over and above what has been factored by the Hon'ble Commission till FY 2009-10 has been Rs. 86.40 Cr.
- 4.75 The total amount claimed under employee expenses by the Petitioner for FY 2009-10 is shown below:

Table 124: Employee expenses proposed	d for FY 2009-10 (Rs. Cr)
---------------------------------------	---------------------------

Particulars	Approved in the MYT Order	Petitioner's Submission
Employee Expenses	156.06	156.06
Less: Capitalisation	16.05	16.05
Net Employee Expenses	140.02	140.02
SVRS Pension	7.50	7.50



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Particulars	Approved in the MYT Order	Petitioner's Submission
Correction on account of Inflation Factor	0.00	8.55
Increase in FRSR Salary	0.00	10.29
Impact of Sixth Pay Commission for DVB Employees	0.00	86.40
Employee expenses	147.52	252.75

### **Commission's Analysis**

- 4.76 The Commission has already factored in the implementation of Sixth Pay Commission's recommendation as detailed in Para 3.113- 3.128 of this Tariff Order.
- 4.77 The Commission approves the employee expenses for FY 2009-10 as shown in the table below.

Particulars	Approved in the MYT Order	Petitioner's Submission	Now Approved
Employee Expenses (Without Impact of Sixth Pay Commission)	147.70	147.70	149.89
Add: Impact of Sixth Pay Commission	8.36	94.76	91.55
Less: Capitalisation	16.05	16.05	16.28
Add: SVRS Pension	7.50	7.50	7.50
Add: Correction on account of Inflation Factor	0.00	8.55	0.00*
Add: Increase in FRSR Salary	0.00	10.29	0.00
Employee expenses	153.54	252.75	232.67

Table 125: Employee Expenses approved by the Commission for FY 2009-10 (Rs. Cr)

\*Already considered while approving 149.89 Cr as Gross Employee Cost

## Administration & General (A&G) Expenses

### **Petitioner's Submission**

4.78 The Petitioner has submitted A&G expenses of Rs 35.38 Cr for FY 2009-10. This includes additional Rs 1.84 Cr towards A&G expenses for FY 2009-10 on account of correction of inflation factor.

Particulars	Approved in the MYT Order	Petitioner's Submission
A&G Expenses	33.54	33.54
Correction of Inflation Factor		1.84

Table 126: A&G Expenses proposed for	r FY 2009-10 (Rs. Cr)
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### **Commission's Analysis**

- 4.79 As per Clause 4.16(b)(i) of the MYT Regulations, A&G expense is a controllable parameter and any surplus or deficit on account of actual A&G expense compared to as approved in the MYT Order for the Control Period shall be to the account of the Petitioner and shall not be trued up.
- 4.80 The Commission has already factored in the impact of revision of inflation index in accordance with the judgement of the Hon'ble ATE as detailed in Para 3.105 3.112 of this Tariff Order.
- 4.81 The Commission approves the A&G Expenses for FY 2009-10 as shown in the table below:

Particulars	Approved in the MYT Order	Petitioner's Submission	Now Approved
A&G Expenses	33.54	33.54	34.04*
Correction of Inflation Factor		1.84	0.00*

#### Table 127: A&G Expenses approved for FY 2009-10 (Rs. Cr)

\*Already considered while approving 34.04 Cr as A&G Expenses

#### Repairs & Maintenance (R&M) Expenses

#### **Petitioner's Submission**

4.82 The Petitioner has submitted R&M expenses of the same amount as approved in the MYT Order, viz. 83.45 Cr.

Table 128: R&N	l expenses	proposed for	r FY	2009-10	(Rs. Cr)
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Particulars	Approved in the MYT Order	Petitioner's Submission
R&M Expenses	83.45	83.45

### **Commission's Analysis**

- 4.83 The Commission had approved an amount of Rs. 83.45 Cr towards R&M expense for FY 2009-10 based on the methodology prescribed in the MYT Regulations.
- 4.84 As per Clause 4.16(b) (i) of the MYT Regulations, R&M Expense is a controllable parameter and any surplus or deficit on account of actual R&M Expense compared to as approved in the MYT Order for the Control Period shall be to the account of the Petitioner and shall not be trued up.
- 4.85 Accordingly, the R&M expenses are approved at the same level as provided in the MYT Order for FY 2009-10 as shown below:



Particulars	Approved in the MYT Order	Petitioner's Submission	Now Approved
R&M Expenses	83.45	83.45	83.45

#### **Operation & Maintenance Expense**

#### **Petitioner's Submission**

4.86 Operation & Maintenance (O&M) Expense is the sum total of expenses incurred towards employee, A&G and R&M expenses. After considering expense capitalization of Rs. 16.05 Cr and efficiency factor at 3%, the Petitioner has claimed net O&M expenses of Rs. 256.57 Cr which is the same as approved in the MYT Order. In addition to this, the Petitioner has claimed Rs 10.39 Cr on account of correction of inflation factor, Rs 10.29 Cr on account of increase in FRSR salary and Rs 86.40 Cr on account of impact of Sixth pay Commission to DVB employees.

#### **Commission's Analysis**

4.87 The Commission has approved the revised employee cost considering the impact of revision of inflation index and revision of salary due to recommendation of Sixth pay Commission. The Commission has also revised A&G Expenses on account of revision of inflation index. The O&M Expenses approved by the Commission is shown below:

Particulars	Approved in the MYT Order	Petitioner's Submission	Now Approved
Employee Expenses (Net of capitalisation)	147.52	147.52	232.67
A&G Expenses	83.45	83.45	83.45
R&M Expenses	33.54	33.54	34.04
Gross O&M Expenses	264.51	264.51	350.16
Efficiency improvement	3%	3%	3%
Net O&M Expenses	256.57	256.57	339.66
Additional O&M Expenses	-	107.08	-
Correction on account of Inflation Factor		10.39	0.00*
Increase in FRSR Salary		10.29	
Impact of Sixth pay Commission		86.40	0.00**

#### Table 130: Amount approved by the Commission (Rs. Cr)

\*Considered while approving A&G Expenses and Employee Expenses \*\*Considered while approving Employee Expenses



#### **Review of Capital Expenditure & Capitalisation**

#### **Capital Expenditure Review**

4.88 Clause 4.14 of Delhi Electricity Regulatory Commission (Terms & Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2007 stipulates as under:

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

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

Table 131	: Capex proposed by NDPL (Rs.	Cr)
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Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	Total
CAPEX proposed by NDPL	333	188	169	160	850

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

Table 132: Revise	d capex proposed	by NDPL (Rs. Cr)
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Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	Total
CAPEX proposed by NDPL	325	225	200	200	950

- 4.91 As per the Petitioner's submission, the capital expenditure claimed to have been incurred in FY 2009-10 is Rs. 374.09 Cr.
- 4.92 The Commission is of the opinion that instead of capital expenditure incurred, the actual capitalisation figures are more important since they have more relevance in terms of the assets actually having been put to use.
- 4.93 The Commission emphasizes that capital expenditure and capitalization would need to be seen separately. The capital expenditure has to be reviewed with respect to schemes proposed by the distribution licensees, approval by the Commission and actual expenditure against approved schemes (along with the opening and closing levels of CWIP). This would indicate the progress in implementation of approved schemes. The year wise capitalisation has to be compared to the capitalisation approved in the MYT Order for the impact in the fixed cost in Tariff.
- 4.94 NDPL has claimed following capitalization for the MYT period so far:

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

#### Table 133: Capitalisation claimed by NDPL (Rs Cr)



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

## **Review of Depreciation**

### **Petitioner's Submission**

4.96 The Petitioner has submitted depreciation of the same amount as approved in the MYT Order, viz. 115.85 Cr.

Table 134: Depreciation	submitted by Petitioner	r for FY 2009-10 (Rs. Cr)
Table 154. Depreciation	submitted by I chilone	101112007-10 (Ks. C1)

Particulars	Approved in the MYT Order	Petitioner's Submission
Depreciation	115.85	115.85

## **Commission's Analysis**

- 4.97 The Commission had approved an amount of Rs. 115.85 Cr for FY 2009-10 in the MYT Order.
- 4.98 As per Clause 4.7 of the MYT Regulations, Depreciation is a controllable parameter, for which the Commission has set targets for each year of the Control Period. Further, as per Clause 4.14 of the MYT Regulations, adjustment to depreciation and return on capital employed for the actual investment vis-à-vis approved capital investment shall be done at the end of the Control Period. Clause 4.16(b) (ii) of the MYT Regulations also provide for true up of Depreciation and ROCE at the end of the Control Period.
- 4.99 The Commission in the Para 3.37 3.52 of this Order has approved revised depreciation for each year of the Control Period after correcting mistakes in the MYT Order. The depreciation now approved for FY 2009-10 is shown below:

Particulars	Approved in the	Petitioner's	Now
	MYT Order	Submission	Approved
Depreciation	115.85	115.85	103.21

### Table 135: Approved Depreciation for FY 2009-10 (Rs. Cr)

## Review of Return on Capital Employed (RoCE)

## **Petitioner's Submission**

4.100 The Petitioner has submitted RoCE including supply margin at the same amount as approved in the MYT Order, viz. Rs. 236.98 Cr.



### **Commission's Analysis**

- 4.101 The Commission had approved Rs. 236.98 Cr towards Return on Capital Employed and Supply Margin in the MYT Order for the FY 2009-10.
- 4.102 As per Clause 4.7 of the MYT Regulations, RoCE is a controllable parameter, for which the Commission has set targets for each year of the Control Period. Further, as per Clause 4.14 of the MYT Regulations, adjustment to depreciation and return on capital employed for the actual investment vis-à-vis approved capital investment shall be done at the end of the Control Period. Clause 4.16(b) (ii) of the MYT Regulations also provide for true up of Depreciation and ROCE at the end of the Control Period.
- The Commission in the Para 3.53 3.61 of this Order has approved revised RRB for 4.103 each year of the Control Period after correcting mistakes in the MYT Order. The Commission has also revised WACC and RoCE for each year of the Control Period in the Para 3.62 – 3.74. The revised RoCE approved for FY 2009-10 approved by the Commission is shown below:

Particulars	Approved in the MYT Order	Petitioner's Submission	Now Approved
RoCE	222.18	222.18	217.17
Supply Margin	14.80	14.80	12.53
RoCE with Supply Margin	236.98	236.98	229.70

## **Consumers' Security Deposits**

- 4.104 The Commission observed that the Petitioner has not accounted for consumers' security deposits in its petition. The Commission directed the Petitioner to submit details of consumer security deposit for FY 2009-10 and where it has been deployed.
- 4.105 The Petitioner through its letter dated July 27, 2011 informed the Commission that it has invested the consumers' security deposits in the business. .The details of the Consumer security deposit for FY 2009-10 as shown in the audited accounts of the Petitioner is shown below:

Particulars	FY 2009-10
Opening Consumer Security Deposit	197.32
Closing Consumer Security Deposit	239.73
Average Consumer Security Deposit	218.53

### 4.106 As per the MYT Regulations,

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



- 4.107 As per the audited accounts the Petitioner had paid interest amount of Rs 14.08 Cr to consumers in FY 2009-10. The Commission observes that Rs 14.08 Cr includes Rs 1.93 Cr on account of interest on consumer security deposit paid for pre privatization period received by DVB which is yet to be transferred to the Petitioner. The Commission in its Order dated April 23, 2007 has already decided that this amount is to be paid by DPCL and therefore cannot be allowed.
- 4.108 As the Petitioner has invested the consumers' security deposits in the business, the Commission is treating the same as funding the revenue gap for the Petitioner. The Commission has allowed carrying cost @ 8.53% for FY 2009-10 for the Petitioner therefore the Commission has assumed consumer security deposit earning @ 8.53% during FY 2009-10. The normative income on consumer security deposit calculated by the Commission is shown below:

Particulars	FY 2009-10
Interest on Consumer Security Deposit paid	12.14
Average Consumer Security Deposit	218.525
Normative Interest on Consumer Security Deposit @ 8.53%	18.64
Difference Considered towards Non Tariff Income	6.50

<b>Table 138:</b>	Interest	on Consumer	Security	Deposit	(Rs.	Cr)
					(	/

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

## Income Tax

## Petitioner's Submission

4.110 The Petitioner has submitted that it incurred Rs. 48.57 Cr in FY 2009-10 on income taxes, while it was allowed only Rs. 15 Cr in the MYT Order. The liability of Rs 48.56 Cr includes MAT liability of Rs. 33.31 Cr for FY 2009-10 at enhanced MAT rate of 16.99% and the balance Rs. 15.92 Cr towards retrospective amendment in section 115 JB of the Income Tax Act with respect to the computation of MAT.

Table 139: Income tax expense	claimed by the Petitioner
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Particulars (Rs. Cr)	Approved in MYT Order	Petitioner's Submission
Income tax	15.0	48.57

## **Commission's Analysis**

- 4.111 The Petitioner has submitted that it has not received any refund during FY 2009-10.
- 4.112 As per the MYT Regulations,



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

4.113 The Commission approves the amount of Rs. 48.57 Cr towards Income Tax as claimed by the Petitioner.

Particulars (Rs. Cr)	Approved in	Petitioner's	Now
	MYT Order	Submission	Approved
Income tax	15.0	48.57	48.57

#### Table 140: Income tax expense approved

#### **Other Expenses**

### **Petitioner's Submission**

- 4.114 NDPL has submitted the following additional expenses for consideration in ARR. computation. These include expenses on:
  - (a) CISF / Security Expenses: NDPL has submitted due to additional deployment of CISF forces as well as the impact of the Sixth Pay Commission, it incurred Rs. 0.55 Cr as expenditure on CISF forces. On withdrawal of CISF in June 2009, NDPL has partly replaced CISF Personnel by other security personnel during FY 09-10 and has incurred Rs. 0.41 Crs on account of same. The additional amount spent on replacement of CISF personnel together with the amount spent on CISF personnel (deployed for part of the year) for FY 2009-10 is Rs. 0.97 Cr.
  - (b) Trading fees: NDPL became a member of the Indian Energy Exchange, Power Exchange, for which it incurred an expense of Rs. 0.17 Cr as the membership fee.
  - (c) Expenses paid to PGCIL/NRPC: NDPL has paid Rs. 0.095 Cr to NRPC as contribution towards annual expenditure of NRPC Secretariat as a member of NRPC. NDPL has further paid Rs. 0.01 Cr to Power Grid Corporation of India Ltd., towards application fee for availing transmission of power from China Light Power India Ltd., from its project in Jhajjar.
  - (d) Credit Rating: The licensee has submitted that it incurred Rs. 0.11 Cr in 2009-10 towards the credit rating of its fund and non-fund based facilities.
  - (e) Expenses on account of energy conservation: NDPL has incurred on 0.10 Cr during the FY 2009-10 on load research survey
  - (f) Litigation expenses for DPCL period: As per the transfer scheme any expenses incurred in respect of litigation pertaining to the period of before July 2002, the liability of DISCOMs was limited to Rs 1 Cr. During the FY 09-10, NDPL has incurred an amount of Rs 0.38 Cr on this account. The amount incurred for the same in FY 2006-07 (base year) was Rs 0.06 Cr. After adjusting the same



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for annual inflation allowed and efficiency factor applied by the Commission in the MYT Order, the amount approved for FY 2009-10 was Rs. 0.07 Cr

- (g) Cost of auditor's certificate: During the year FY 2009-10, the Commission has directed to get the veracity of certain figures, information like power purchase cost, 6<sup>th</sup> Pay Commission payment etc. be certified from the Auditor of the company. NDPL has incurred an amount of Rs 0.04 Cr towards the same
- (h) License Fees on energy bill: As per clause 12.1, of the Distribution and Retail Supply License, NDPL is required to pay annually 0.05% of amount billed of previous year as license fees to the Commission. Since the same is linked to sales which is uncontrollable and is trued up, the license fee too needs to be trued up. NDPL has claimed Rs 0.37 Cr on this account for FY 2007-08, FY 2008-09 and FY 2009-10.
- (i) Street light material issued to MCD/PWD: During the policy direction period NDPL had issued street light material to PWD/MCD, the same has not been reimbursed by the MCD. NDPL had filed a petition before the Commission for recovery of Rs 4.79 Cr towards the material issued by NDPL to MCD/PWD. The Commission vide its Order dated 22.09.2009 read with Order dated 06.04.2010 has revised the rates w.e.f. 01.04.08 (on inclusive basis) to recover the material cost as well. However, in respect of earlier periods there was no finding in the Order.
- (j) Tender cost for procurement of material: The Commission has issued the Competitive Bidding Guidelines during the FY 2009-10 which provided for procurement of any materials/services of an amount exceeding Rs 0.25 Cr through open tendering. The limit of Rs 0.25 Cr was subsequently increased to Rs 1 Cr vide revised guidelines issued by the Commission on FY 2009-10. This additional expense has been necessitated due to the Order of the Commission, NDPL be allowed an amount of Rs 0.47 Cr which has been incurred towards advertisement for Open Tendering during the FY 2009-10.
- (k) Power Banking: The Petitioner has submitted that the net impact of cumulative carrying cost for power banking for FY 2009-10 works out to Rs 6.12 Cr.
- (1) DVB arrears: NDPL has submitted that DVB arrears of Rs. 0.66 Cr were collected in 2008-09 which are considered as part of the revenue realized. The licensee has submitted that expenses on this account be included in its ARR as the same are to be paid to DPCL. NDPL has requested to include Rs. 0.53 Cr in ARR calculations, which is equivalent to 80% of DVB arrears (non Government), collected.
- 4.115 These proposed costs are shown below along with the costs approved earlier in the MYT Order.



	FY 2009-10			
Other Expenses	Approved in the MYT Order	Petitioner's Submission		
CISF/Security Expenses		1.00		
Trading of Power		0.17		
Fees paid to PGCIL/NRPC		0.11		
Credit Rating		0.11		
Energy Conservation		0.10		
Litigation Expense DPCL Period		0.31		
Cost of Auditor Certificates		0.04		
License Fees on Energy Billed		0.37		
Street Light Material Issued to MCD/PWD		4.79		
Tender Cost		0.47		
Power Banking		6.12		
DVB Arrears		0.53		
Total	0.00	14.12		

Table 141: Additional expenses claimed for FY 2009-10 (Rs Cr)

### **Commission's Analysis**

- 4.116 In the MYT Order, the Commission had not made any provision for additional expenses apart from the expenses considered and approved in the Order.
- 4.117 With respect to CISF / Security expenditure, the Commission observes that the deployment of CISF / Security force has helped in reduction of AT&C losses. Therefore, any cost on account of CISF / Security forces should be first adjusted towards the benefit on account of overachievement in reduction of AT&C losses, if any, before passing on any benefit to consumer or the distribution licensee. Therefore, the Commission has not considered any cost on account of CISF expenditure as new initiative.
- 4.118 The Commission allows additional expenses on account of expenses related to fee for power exchange, fee paid to PGCIL/NRPC, energy conservation, cost of auditor's certificate and expenses on obtaining a credit rating to the extent requested in the this petition as the Petitioner has incurred these expenses for the first time during the MYT Control Period and hence these were not included in the O&M Expenses for the base year while preparing the MYT Order.
- 4.119 The Commission also allows additional licensee fee paid by the Petitioner on account of energy sales as energy sales being an uncontrollable parameter.
- 4.120 With respect to the financing cost of power banking, the Commission believes that banking contracts are revenue neutral. The electricity industry follows a practice wherein in case of forward/ advance banking, the utility demands additional power @ 4% to be returned and in case of backward banking, the utility has to return 4% extra power. The Commission considers the power banked in advance by the utility as



energy sale at Rs 4 per unit because if it does not consider it then it would be burdening present consumers for future consumption, which the Commission deems inappropriate. The utility will be receiving the power banked along with 4% additional power in the next year. The Commission considers total power received as power purchase @ Rs 4 per unit. This allows the utility power purchase cost on additional 4% power received by them @ Rs 4 per unit, which is equivalent to the financing cost of this banking.

- 4.121 The Commission has already rejected the Petitioner's contention while truing up for FY 2008-09.
- 4.122 With reference to litigation expenses for DPCL period, it was part of A&G expenses approved by the Commission, which is a controllable parameter. Mere fact that the Petitioner had incurred Rs 0.38 Cr on litigation expenses, does not qualify the Petitioner for additional amount from the Commission in the ARR. In case the actual litigation expenses for DPCL period were less than Commission approved values, the Petitioner would not have returned the same back to the consumers through reduction in ARR. Therefore, the Commission has rejected the Petitioner's request and not allowed any additional amount towards this.
- 4.123 With reference to non payment by MCD/PWD for street light material of 4.79 Cr issued to them during the policy direction period, the Commission believes this is a commercial dispute between the Petitioner and the MCD/PWD, which they need to resolve between themselves. The Commission's Order of composite charges is applicable for the current Control Period. The Commission has not allowed any amount towards this expense.
- 4.124 The Commission rejects the Petitioner's claim of tendering cost of Rs 0.47 Cr for procurement of material through open tender as the Petitioner was always required to procuring material through tenders. Any cost incurred by the Petitioner during the Policy Direction Period on account of tenders must be part of the A&G expense of the Petitioner. This is not a new initiative and cannot be allowed in the ARR.
- 4.125 The Commission allows the Petitioner Rs 0.53 Cr (80% of Rs 0.66 Cr) as expenses incurred on DVB arrears.
- 4.126 The total amount approved by the Commission under the head 'Other Expenses' is Rs. 1.43 Cr.

Other Expenses	Approved in the MYT Order	FY 2009-10 Petitioner's Submission	Approved by Commission
CISF/Security Expenses		1.00	-
Trading of Power		0.17	0.17
Fees paid to PGCIL/NRPC		0.11	0.11
Credit Rating		0.11	0.11
Energy Conservation		0.10	0.10

Table 142: Other expenses approved f	for FY 2009-10 (Rs Cr)
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	FY 2009-10		
Other Expenses	Approved in the MYT Order	Petitioner's Submission	Approved by Commission
Litigation Expense DPCL Period		0.31	-
Cost of Auditor Certificates		0.04	0.04
License Fees on Energy Billed		0.37	0.37
Street Light Material Issued to MCD/PWD		4.79	-
Tender Cost		0.47	-
Power Banking		6.12	-
DVB Arrears		0.53	0.53
Total	0.00	14.12	1.43

### Non Tariff Income (NTI)

### **Petitioner's Submission**

4.127 The Petitioner in its True up Petition has considered Non Tariff Income of Rs. 38.90 Cr for FY 2009-10, while the amount approved in the MYT Order was Rs. 29.86 Cr. The details of Non Tariff Income proposed by the Petitioner is shown below:

Particulars	Petitioner's Submission
Non Tariff Income as per audited accounts	102.25
Less:	
Rebate on power Purchase Cost	19.35
Transfer from capital grants	0.36
Transfer from consumer contribution for capital works	7.53
Interest/Short term capital gain	1.22
Service Line Charges to be deferred in future years	5.11
Interest on Investment of Contingency Reserve (to be reinvested in reserves)	1.23
Income from Other Business	1.58
Financing Cost of LPSC	9.83
LPSC Income	16.09
Commission on DVB arrears	0.13
Service Tax on Maintenance charges	0.92
Total Non Tariff Income	38.90

## **Commission's Analysis**

4.128 The Commission in the MYT Order had mentioned that the NTI shall be considered for true up at the end of the Control Period. In light of the MYT Regulations, the Commission re-examined the issue of Non Tariff Income, which shaped the approach



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towards treatment of Non Tariff Income followed by the Commission in the True up Order for FY 2007-08. This approach is described below.

- 4.129 Clause 5.25 of the MYT Regulations states that "The amount received by the licensee on account of Non Tariff Income shall be deducted from the aggregate revenue requirement in calculating the net revenue requirement of such licensee". Clause 5.27 further elaborates that "The net aggregate revenue requirement of the licensee eligible for recovery during each year of the Control Period shall be determined after deducting from the aggregate revenue requirement, the non tariff income and the other income". A joint reading of both the above clauses indicates that NTI being an integral part of the revenue requirement shall be trued up at the end of each year of the Control Period.
- 4.130 As per the MYT Regulations only two sets of parameters are recognized i.e. controllable and uncontrollable. While the uncontrollable parameters include revenue / expenditure on account of sales and power purchase and provide for its annual true up, the controllable parameters include O&M expense, Capex related expenses and RoCE, and does not specifically include Non Tariff Income. Also, the MYT Regulations in regard to controllable expenses specifically provide for true up of Capex related expenditure i.e. RoCE and Depreciation at the end of the Control Period.
- 4.131 The Commission observes that the Petitioner has shown earnings of Rs 2.40 Cr from other than License Business which includes Rs 1.10 Cr from Consultancy, Rs 0.56 Cr from utilization of NDPL's assets and Rs 0.74 Cr through Training. It has proposed to share earning from utilisation asset in 80:20 ratio, 50:50 in case of Training, while for consultancy it has submitted that it will not share any revenue with the consumer as it has deployed deployed additional manpower for consultancy/new manpower has been recruited for other department from which employees have been rotated to this department. The Petitioner has proposed to share 0.82 Cr with the consumers against the total earnings of Rs 2.40 Cr, and subtracted Rs 1.58 Cr from the non tariff income.
- 4.132 The Commission through its letter dated July 26, 2011 directed the Petitioner to submit proof that it has deployed additional man power and not used the man power of NDPL. The Commission find it very difficult to believe that NDPL's man power in not being used for the consultancy. If that is the case, let the Petitioner float a separate subsidiary for consultancy services, to bring in transparency / clarity in the operations of the Petitioner. In the present set up, the Commission is not accepting the NDPL's submission that it is not using man power of the NDPL for consultancy business and hence considered income from consultancy business as other business.
- 4.133 As per the other business regulations of the Commission 80% of the revenue of the other business of the licensee will be considered in the distribution business.
- 4.134 The Commission has considered 80% of the income from other business i.e. Rs 1.92 Cr as the non tariff income and subtracted 0.48 Cr from total non tariff income submitted by the Petitioner on this account.



- 4.135 The Petitioner has subtracted Rs 0.92 Cr from non tariff income on account of Service Tax paid by the Petitioner towards income on account of Street Light Maintenance Charges from MCD which has not been reimbursed by MCD/PWD.
- 4.136 The Commission believes that the Petitioner should charge the service tax on Service Light Maintenance Charges to MCD/PWD and not claim this from the ARR. The Commission rejects Petitioner's stand and has not subtracted Rs 0.94 Cr from non tariff income.
- 4.137 The Petitioner has submitted that it has claimed total rebate of 19.65 Cr, of which Rs 15.04 Cr was upto 1% rebate earned on timely payment of power purchase bills. It has also submitted that it has allowed a rebate of 0.30 Cr on sale of power, of which 0.15 Cr was upto 1% rebate allowed to purchaser on timely payment power purchase bill by the purchaser.
- 4.138 As detailed in Para 3.94 3.99 in this Order, the Commission has decided to go in appeal against the Hon'ble ATE Order on considering only 1% rebate on power purchase as the Non tariff Income of the Petitioner. The Commission therefore has not implemented the Judgement of the Hon'ble ATE in this regard. The Commission has considered entire rebate earned on power purchase as Non Tariff Income.
- 4.139 The Petitioner had collected late payment surcharge (LPSC) of Rs 16.09 Cr in FY 2009-10 from its Consumers. As the Petitioner charges LPSC @ 18% per annum (1.5% per month), the principle amount on which LPSC has been charged will be 89.39 Cr.
- 4.140 The Commission in its MYT Order dated Feb 23, 2008 had approved funding of working capital @ 9.5% considering SBI PLR of 12.25% prevalent at the time of issuing MYT Order. As prevailing SBI PLR as on April 1, 2009 was 12.25%, the Commission has allowed the financing cost for LPSC @ 9.5%. The financing cost approved by the Commission is shown below:

Particular	FY 2009-10
LPSC Collected (@ 18%)	16.09
Principle amount on which LPSC was charged	89.39
Interest Rate for funding of Principle of LPSC	9.5%
Interest approved on funding of Principle amount of LPSC	8.49

Table 144: Funding	of LPSC (Rs Cr)
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4.141 NDPL through its letter dated June 24, 2011 submitted to the Commission that it has inadvertently shared higher income on account of maintenance of street lights during FY 2007-08, FY 2008-09 and FY 2009-10, as the Petitioner is entitled to earn incentive from the income from maintenance of the street lights in accordance with the Commission's Order, if it is able to achieve certain performance standard. However, the Petitioner had not provided detailed working/supporting documents for the claim. The Commission's Order on incentive/ penalty on street light maintenance is applicable from FY 2005-06. The Commission directs the Petitioner to provide details of its claim along with the supporting documents along with its performance from FY 2005-06 onwards. The Commission will take up this matter s separately.



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

Particulars	Petitioner's Submission
Non Tariff Income as per audited accounts	102.25
Less:	
Transfer from capital grants	0.36
Transfer from consumer contribution for capital works	7.53
Interest/Short term capital gain	1.22
Service Line Charges to be deferred in future years	5.11
Interest on Investment of Contingency Reserve (to be reinvested in reserves)	1.23
Income from Other Business	0.48
Financing Cost of LPSC	8.49
Add:	
Interest on Consumer Security Deposit	6.50
Total Non Tariff Income	84.33

Table 145: Trued-up Non Tariff Income approved (Rs. Cr)

# **DTL Claim**

- 4.143 The Commission in its Tariff Order dated May 28, 2009 approved provisional claim of Rs 117.95 Cr of DTL on account of revision of Power purchase cost for past period. NDPL share in the same was Rs 30.67 Cr.
- 4.144 In the matter of power purchase cost for FY 2005-06 and RLDC/ULDC charges for FY 2002-07, the Commission passed an Order dated November 12, 2009 and has allowed the power purchase cost of Rs. 114.10 Cr for the FY 2005-06 and RLDC/ULDC Charges of Rs. 3.95 Cr for FY 2002-07. NDPL share in the same was Rs 31.96 Cr.
- 4.145 The Commission has considered the DTL claims of 62.63 Cr as approved by the Commission while truing up ARR for FY 2009-10, although the Petitioner has not claimed any expense on this account in its petition.

# **Annual Revenue Requirement for FY 2009-10**

4.146 The Commission approves the Annual Revenue Requirement (ARR) after incorporating the above changes at Rs 3259.42 Cr for FY 2009-10. The ARR approved in the Tariff Order dated May 28, 2009, as claimed by the Petitioner and the trued up ARR is summarised below:



	FY 2009-10				
Aggregate Revenue Requirement	Approved in Order Dated May 28, 2009	Petitioner's Submission	Now Approved		
Power purchase cost	1811.20	2558.55	2558.55		
O&M expenses	256.57	256.57	339.66		
Correction of inflation factor	0.00	10.39	0.00*		
Increase in FRSR salary	0.00	10.29	0.00		
Impact of Sixth Pay Commission	0.00	86.40	0.00*		
Depreciation	115.85	115.85	103.21		
ROCE including supply margin allowed	236.98	236.98	229.70		
Income Tax expenses	15.00	48.57	48.57		
Other Expenses	0.00	14.12	1.43		
DTL Claim			62.63		
Less:					
Other income including Non Tariff Income	29.86	38.90	84.33		
Interest/other expenses capitalized	5.69	-	-		
Aggregate Revenue Requirement	2254.05	3298.29	3259.42		

Table 146: Aggregate Revenue Requirement (Rs Cr)

\*Included in O&M Expesnes

## **Revenue available towards ARR**

#### **Petitioner's Submission**

4.147 The Petitioner has submitted the net revenue from sale of power to be considered towards annual revenue requirement as Rs. 2564.49 Cr after adjustment towards electricity tax and the Petitioner's share of over-achievement incentive. The Petitioner has retained the consumers' share in the incentive on account of overachievement in AT&C loss reduction for meeting the revenue gap for FY 2009-10 as summarized below:

Particulars	Petitioner's Submission
Total Amount Realized	2759.13
Less: E Tax	117.89
Less: Benefit to be retained by the Petitioner	76.22
Total Revenue available towards ARR	2462.01
Less: DVB Arrears	0.53
Revenue available for Expenses	2564.49

#### Table 147: Revenue Details submitted by the Petitioner



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#### **Commission's Analysis**

- 4.148 The Petitioner has offered the consumer share of the overachievement towards meeting the revenue gap for FY 2009-10. The Commission has accepted the Petitioner's requested and not transferred the consumer's share in benefit on account of reduction of AT&C losses better than the target given to the Petitioner. Thus, there will be no addition to the contingency reserve during FY 2009-10.
- 4.149 The Commission has computed the total revenue of the Petitioner available towards ARR to be Rs 2567.42 Cr, as detailed below:

Particulars	Now Approved
Total Amount Realized	2750.64
CISF/Security Expenses	0.97
Less: Benefit to be retained by the Petitioner	56.64
Total Revenue available towards ARR	2693.04
Less: Net LPSC Considered as Other Income	7.60
Less: Commission on DVB arrears considered as Other Income	0.13
Less: E Tax	117.89
Revenue available for Expenses	2567.42

 Table 148: Revenue available towards ARR approved for FY 2009-10

# **Contingency Reserve**

- 4.150 As per the provisions of MYT Regulations, a Contingency Reserve is to be maintained for Tariff Stability and passing the benefits derived to the consumers under the MYT Framework. The Commission had in its MYT Order directed the Petitioner to transfer the amount allowed as contribution to the Contingency reserve in the past that is Rs. 20.37 Cr to the MYT Contingency Reserve. The Commission had also directed the Petitioner to maintain separate accounts in its books and reflect the balance in the MYT Contingency Reserve Account in the Balance Sheet. The Petitioner shall use the amount for investing in safe securities and earning returns based on the market conditions. However, the Petitioner is refrained from using the money for speculative purposes. The Commission also directed the Petitioner to transfer the refunds received from DTL, IP Station, Rajghat Power House, GTPS and PPCL as specified in the MYT Order of the respective Companies/ licenses to the Contingency Reserve.
- 4.151 The Commission in its True up Order for FY 2007-08, directed the Petitioner to transfer Rs 25.20 Cr on account of overachievement in AT&C loss reduction in Contingency reserve, which is revised to Rs 20.24 Cr in this Order
- 4.152 The Petitioner has offered the consumer share of the overachievement towards meeting the revenue gap for FY 2009-10. The Commission has accepted the Petitioner's requested and not transferred the consumer's share in benefit on account



of reduction of AT&C losses better than the target given to the Petitioner. Thus, there will be no addition to the contingency reserve during FY 2009-10.

4.153 The opening level of Contingency Reserve along with the interest thereon is summarized below:

Particular	Rs Cr
Opening Level of Contingency Reserve for FY 2009-10	42.53
Add: Interest during the year on the opening balance	2.98
Closing level of Contingency Reserve for FY 2009-10	45.51

#### Table 149: Contingency Reserve (Rs. Cr)

# **Revenue (Gap)/ Surplus**

4.154 The revenue (gap)/ surplus for FY 2009-10 as approved in the Tariff Order dated May 28, 2009, submitted by the Petitioner and trued up by the Commission is summarised below:

Particulars (Rs. Cr)	Approved in Tariff Order dated May 28, 2009	Petitioner's Submission	Now Approved	
ARR for FY 2008-09	2,410.05	3,298.28	3259.42	
Revenue available towards ARR	2,651.81	2,564.49	2567.42	
Revenue (Gap)/ Surplus	241.75	(733.79)	(692.00)	

#### Table 150: Revenue (Gap)/ Surplus for FY 2009-10 (Rs Cr)

4.155 As shown above, the approved net revenue gap is Rs. 692 Cr for FY 2009-10 which would be adjusted in the determination of Aggregate Revenue Requirement for FY 2011-12. The treatment of this net revenue gap is dealt with in Chapter A6.



# A5: ARR FOR FY 2011-12

## Approach

- 5.1 The Petitioner has filed a petition for determination of Aggregate Revenue Requirement for FY 2011-12. The Commission has extended the MYT Regulations and the MYT Control Period for a further period of one year up to March 31, 2012. The Commission vide its Order dated April 25, 2011 admitted the petition for approval of ARR for FY 2011-12.
- 5.2 This Chapter contains detailed analysis of the petition submitted by the Petitioner and the various parameters approved by the Commission for determination of ARR and tariff for the Petitioner for FY 2011-12.

# **Energy Sales**

### **Petitioner's Submission**

- 5.3 The Petitioner has projected energy sales for FY 2010-11 based on the actual sales for the first six months of FY 2010-11 (i.e. up to December 2010). Based on the projected sales for FY 2010-11, the Petitioner has projected sales for FY 2011-12 using various Compound Annual Growth Rates (CAGR) observed in actual consumption by various consumer categories during the period FY 2004-05 to FY 2009-10.
- 5.4 However for categories like public lighting, agriculture, the Petitioner has used a nominal growth rate of 5% over sales of FY 2010-11 to project energy sales for FY 2011-12. Further, for Railways and DMRC, the Petitioner has used a nominal growth rate of 9% to forecast consumption in FY 2011-12.
- 5.5 The Petitioner has submitted an actual energy consumption of 5,800.17 MU in FY 2009-10 and an estimated energy sale of 6,381.61 MU in FY 2010-11. Later, the Petitioner submitted actual energy sales for the entire year of FY 2010-11, which is 6,400.17 MU.
- 5.6 The Petitioner's proposed sales for various consumer categories in FY 2011-12 is given below:

Category Wise Sales	Petitioner's Submission
Domestic	2,808.80
Non-Domestic*	1,237.37
Industrial	2,197.16
Public Lighting	86.54
Irrigation & Agriculture	22.21
Railway Traction	71.04
DMRC	189.01
Others <sup>#</sup>	280.00



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Category Wise Sales	Petitioner's Submission
Total	6,892.13

\* Excluding DJB; # Including DJB.

5.7 The "Others" category includes sales projected under the categories of "Own Consumption" and "Theft" and energy sales to DJB.

### **Commission's Analysis**

- 5.8 The Commission is of the view that there are various factors which can have an effect on the actual consumption of electricity that are often beyond the control of the licensee, such as Government policy, economic climate, weather conditions, forcemajeure events like natural disasters, etc. Hence, an attempt has been made to take into consideration various factors affecting electricity consumption and estimate the interrelationships among them to arrive at a reasonably accurate forecast of energy sales within a range for the purpose of estimating future costs/ revenues.
- 5.9 Accordingly, for projecting the category-wise energy sales of each Distribution Licensee for FY 2011-12, the Commission has considered the past growth trends in each consumer category as explained below:
  - (a) The Commission has adopted an Adjusted Trend Analysis Method for projecting the sales/ connected load/ number of consumers of Domestic, Non Domestic, Industrial, Agriculture, Public Lighting and Other categories. This method assumes that the underlying factors which drive the demand for electricity are expected to follow the same trend as in the past. The Commission has however, discounted for any outlier (relative to the trend) observed in the growth rates over the period of 5 years and excluded them while projecting energy sales for FY 2011-12.
  - (b) The strength of this method, when used with balanced judgment, lies in its ability to reflect recent changes and therefore makes it well suited as a basis for short-term projections in context of ARR determination.
  - (c) This method makes use of two statistical tools, namely the Compounded Annual Growth Rate (CAGR) and a simple average of the year-on-year growth rates (excluding the outliers), wherever appropriate. As per this method, Compounded Annual Growth Rates (CAGRs) were calculated from the past figures for each category, corresponding to different lengths of time in the past five years, along with the year on year growth rates since FY 2005-06. Pertinently, the CAGR is computed for each category for the past 5-year period FY 2005-06 to FY 2010-11, the 4-year period FY 2006-07 to FY 2010-11, the 3-year period FY 2007-08 to FY 2010-11, and the 2-year period FY 2008-09 to FY 2010-11, along with the 1-year growth rate of FY 2010-11 over FY 2009-10.
  - (d) Subject to the specific characteristics of each consumer category, either a particular CAGR or an average of the year-on-year growth rates is chosen as the basis of sales projection for that category. For example, if an abnormal growth rate (high or low), relative to the trend, is observed at the beginning of



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the five year period considered, then a shorter period is considered for the trend analysis and projections, i.e. appropriately a 3-year CAGR or a 4-year CAGR has been considered. However, if any outlier(s) is observed in the middle of this 5 year period, then a simple average of the year-on-year growth rates, excluding the outliers has been considered while making projections for FY 2011-12.

- (e) For making projections of sales and connected load/ number of consumers, the actual sales for FY 2010-11 for each consumer category, as submitted by the Petitioner, is taken as the base, i.e. the CAGR is applied over the actual sales for FY 2010-11 to make projections for each category for FY 2011-12. Further, for projection of number of consumers, sale and connected load of subcategories/ slabs of any consumer category, the Commission has used the ratio of actual sales in the subcategory to total sales of the category for the Petitioner observed in FY 2010-11. Although the Commission has not accepted Form 2.1 (a) of the Petitioner for FY 2010-11, (which shall be considered by the Commission in the True-Up exercise for FY 2010-11 after validation of the same), the Commission has considered the category wise / slab wise number of consumers, sales and connected load shown in it for the projection of the number of consumers, sale and connected load of subcategories/slabs of consumers category as the Commission felt that it shall not be prudent to make assumptions
- (f) For projection of sales for DIAL and DJB, which were included in the Non Domestic category till FY 2008-09 but were approved as a separate tariff category since FY 2009-10, the Commission is of the view that the sudden exclusion of DIAL and DJB from the Non Domestic category and their subsequent segregation into a separate tariff category would depict an extremely distorted picture for making projections for FY 2011-12. The Commission has, therefore, decided that DIAL and DJB shall be included in the Non Domestic category only for the limited purpose of projecting the total sales of the Non Domestic category in FY 2011-12.
- (g) Thereafter, the specific quantum of sales to DIAL and DJB is isolated proportionately from the total quantum of Non Domestic sales, based on the average of actual proportion of this sales to the total sales to the Non Domestic category (inclusive of DIAL and DJB) observed in FY 2010-11.
- 5.10 The Commission has approved the sales/ connected load/ number of consumers of each consumer category as detailed below:

## **Domestic Consumers**

5.11 The Commission has observed that the energy sales to the domestic category in FY 2010-11 is 2734.03 MU, which is a growth of 12.38% from that in the preceding year, FY 2009-10. The major reasons contributing to the increase in domestic sales in the recent past were metering of un-metered consumers, electrification of JJ clusters, billing of SPD under the slab "Domestic lighting/fan and power", etc. Considering the above, for FY 2011-12, the Commission has projected an increase in sales to this



category at the rate of 9.65% over the actual sales for FY 2010-11, which is the 5-year CAGR, the same being the most appropriate indicator of the trend.

- 5.12 Based on the methodology detailed above, the Commission approves energy sales of 2997.96 MU for the domestic category for FY 2011-12.
- 5.13 For projection of sale to subcategories of domestic consumers, the Commission has used the ratio of actual sales in the subcategory to total domestic sales of the Petitioner observed in FY 2010-11.
- 5.14 For projection of number of consumers and connected load in the Domestic category in FY 2011-12, the above mentioned approach has been followed. Accordingly, growth rates of 8.65% and 13.66% have been used to project the number of consumers and connected load for FY 2011-12 respectively.

### **Non-Domestic Consumers**

- 5.15 In the non-domestic category, the CAGR calculated over the past five year period (FY 2005-06 to FY 2010-11), four year period (FY 2006-07 to FY 2010-11), three year period (FY 2007-08 to FY 2010-11) and two year period (FY 2008-09 to FY 2010-11) are 10.44%, 10.49%, 11.23% and 13.25% respectively, while, the growth rate for FY 2010-11 over the past year FY 2009-10 is 10.60%.
- 5.16 The Commission has decided that using an extremely short-term basis for projection would not be sufficient to capture the growth trend justifiably. The Commission has also observed that the year on year growth rate observed in FY 2009-10 over FY 2008-09 being abnormally high at 15.96%, using a 5 year CAGR would not have been appropriate either. Hence, the quantum of sales to this category in FY 2011-12 has been projected using an average of the year-on-year growth observed in the past five years (excluding the above mentioned outlier), which is calculated as 9.11%.
- 5.17 Based on the methodology detailed above, the Commission has arrived at energy sales of 1395.08 MU to the non-domestic category (inclusive of DJB) for FY 2011-12. The quantum of energy sales to this category in FY 2010-11 is 1278.64 MU.
- 5.18 Based on the proportion of sales to DJB, to the total sales of the non-domestic category (including DJB) in FY 2010-11, the Commission has projected sales of 198.60 MU to DJB in FY 2011-12. In FY 2010-11, 182.02 MU of energy was sold to DJB.
- 5.19 For computing revenue as per the approved tariff schedule which treats DIAL and DJB as a part of the 'Others' category, the remaining energy sales of 1196.48 MU (1395.08 MU deducted by 198.60 MU) are considered as sales to the non-domestic category, excluding DJB, while sales to DJB are taken as a part of the 'Others' category.
- 5.20 For projection of sale to subcategories of non domestic consumers, the Commission has used the ratio of actual sales in the subcategory to total non domestic sales of the Petitioner observed in FY 2010-11.



5.21 For projection of number of consumers and connected load in the non-domestic category in FY 2010-11, the above mentioned approach has been followed. Accordingly, growth rates of 3.60% and 3.22% have been used to project the number of consumers and connected load for FY 2011-12 respectively.

## **Industrial Consumers**

- 5.22 An assessment of the growth in sales to this category indicates variations in growth in the NDPL area with the year-on-year growth rate ranging from 1.85% to 21.53% in the past five years. While the 5-year and 4-year CAGR for sales is 6.85% and 8.14%, the 3-year CAGR is 4.01% and the 2-year CAGR is 5.22%, the rate of growth of sales in FY 2010-11 over FY 2009-10 is 4.16%.
- 5.23 The Commission has observed that the energy sale to the industrial category in FY 2010-11 is 1961.96 MU, which is 4.16% higher than 1883.66 MU sold to this category in FY 2009-10.
- 5.24 For projecting the sales for FY 2011-12, the Commission analysed the trend in sales and the economic outlook of the State for the forthcoming year. Keeping in line with the approach of excluding the outliers in the growth rates observed in the last five years, the Commission has projected an increase in sales to this category at 5.22% which is the 2-year CAGR for this category (as the year-on-year growth rates observed in the earliest 3 years of the 5 year period considered were abnormal at 1.85%, 21.53% and 1.62% respectively).
- 5.25 Based on the methodology detailed above, the Commission approves energy sales of 2064.45 MU to the Industrial category for FY 2011-12.
- 5.26 For projection of sale to subcategories of industrial consumers the Commission has used the ratio of actual sales in the subcategory to total industrial sales of the Petitioner observed in FY 2010-11.
- 5.27 For projection of number of consumers and connected load in the industrial category in FY 2011-12, the above mentioned approach has been followed. Accordingly, growth rates of -0.80% and 4.08% have been used to project the number of consumers and connected load for FY 2011-12 respectively.

# **Public Lighting**

- 5.28 The Commission has observed that the sales to this category have shown widely varying growth in recent years. While the immediate growth rate in FY 2010-11 over FY 2009-10 comes out to be 61.56%, the 2-year, 3-year, 4-year and 5-year CAGR are 15.11%, 9.99%, 7.46% and 8.60% respectively. Considering the huge variations in sales with respect to this category, the Commission has decided to go with the 5-year CAGR of 8.60% as the basis for projection for FY 2011-12 in order to smoothen out year-to-year variations in sales.
- 5.29 The quantum of energy sales to this category is, hence, projected at 96.41 MU for FY 2011-12, vis-à-vis 88.77 MU in FY 2010-11.



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#### Irrigation and Agriculture

- 5.30 The Commission has observed that the actual sales in this category have also shown widely varying growth rates in the recent years. While the immediate growth rate in FY 2010-11 over FY 2009-10 comes out to be -15.15%, the 2-year, 3-year, 4-year and 5-year CAGR are -19.06%, 13.69%, 16.49% and -2.56% respectively. Considering the huge variations in sales with respect to this category, the Commission has decided to go with the 5-year CAGR of -2.56% as the basis for projection for FY 2011-12.
- 5.31 The quantum of energy sale to this category is, hence, projected at 15.89 MU for FY 2011-12, vis-à-vis 16.31 MU in FY 2010-11.

### **Railway Traction**

5.32 The Commission has approved sales projections to this category at 61.51 MU for FY 2011-12, as per the submission made by Northern Railways to the Commission.

## DMRC

5.33 The Commission has considered the submission made by DMRC to the Commission for approving sales at 190.00 MU for FY 2011-12.

#### **Other Categories**

- 5.34 The Petitioner's own consumption, enforcement and temporary connections have been included in the "Others" category.
- 5.35 An assessment of the growth in sales to this category indicates large variations in growth in the NDPL area on a year-to-year basis with the CAGR ranging from 40.19% (2-year CAGR) to 11.70% (1-year growth rate). The Commission feels that it is difficult to project the sales to this category, based on past years trend and hence, has decided to keep it at last year's (FY 2010-11) level ,viz. 111.65 MU.

#### **All Categories**

5.36 The Commission approves the following energy sales for NDPL for FY 2011-12. Table 152: Approved Sales for FY 2011-12 (MU)

Category Wise Sales	Petitioner's Submission	Now Approved
Domestic	2,808.80	2,997.96
Non-Domestic*	1,237.37	1,196.48
Industrial	2,197.16	2,064.45
Public Lighting	86.54	96.41
Irrigation & Agriculture	22.21	15.89
Railway Traction	71.04	61.51
DMRC	189.01	190.00
Others <sup>#</sup>	280.00	310.25
Total	6,892.13	6,932.95

<sup>\*</sup> Excluding DJB; # Including DJB



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# Revenue in FY 2011-12 at Existing Tariff

- 5.37 As per the two-part tariff principle followed in the NCT of Delhi, the tariff for each category consists of fixed/ demand charges as well as energy charges. The fixed/ demand charges are specified for different categories as a fixed amount per month, or as a fixed amount per kW of connected load per month. The energy charges, on the other hand, are always usage-based and are specified per unit of electricity consumed.
- 5.38 For Domestic consumers with connected load less than 2 kW, the revenue from fixed charges is calculated by multiplying the corresponding fixed charge with the number of consumers in that particular tariff slab. For Domestic consumers with connected load exceeding 5 kW, the revenue from demand charges is calculated by multiplying the specified demand charge with the connected load (in kW) of the category. For calculation of revenue from energy charges, the actual usage is multiplied by the applicable tariff category slab.
- 5.39 For the Non Domestic, Industrial, Railway Traction, DMRC and DJB categories, billing is done either on kW or kVA basis, as specified in the approved tariff schedule for FY 2009-10. Since projections for FY 2011-12 are done only on kW basis for connected load and on kWh basis for energy sales, whenever the tariff is specified in kVA/ kVAh terms, the relevant kW/ kWh projection is divided by the Power Factor in order to obtain the corresponding kVA/ kVAh projection. Thereafter, revenue from demand charges is calculated by multiplying the demand charge of each tariff slab with the connected load of that slab, while revenue from energy charges is calculated by multiplying the energy charges specified for each tariff slab with the energy consumption projected for that slab.
- 5.40 The Power Factor for each tariff slab where the tariff is specified in kVA/ kVAh terms has been considered as per the submission made by the Petitioner for FY 2010-11. The Power Factor considered by the Commission for different categories is shown below:

Consumer slab	<b>Power Factor</b>
NDLT-I	0.91
NDLT-II	0.97
Mixed Load (High tension)	
Supply on 11 KV and above	0.91
Supply on LT (400 volts)	0.93
SIP (10 – 100 kW)	0.92
Large Industrial Power (LIP) > 100 kW	
Supply on 11 KV and above	0.96
Supply on LT (400 volts)	0.93
Railway Traction (other than DMRC)	0.99
DMRC	0.99
DJB	0.90

 Table 153: Power Factor considered by the Commission



(Sunita Yadav) Secretary 5.41 Based on the above methodology, the Commission has projected the total revenue billed in FY 2011-12 to be Rs. 3,114.47 Cr. The category-wise revenue billed projected by the Commission for FY 2011-12 is shown below:

Summary of Revenue	Fixed Charges	Energy Charges	Total Revenue Billed
Domestic	52.31	965.37	1017.68
Non-Domestic	78.40	646.00	724.40
Industrial	88.73	962.46	1051.19
Public Lighting	0.00	44.83	44.83
Irrigation & Agriculture	0.34	2.50	2.84
Railway Traction	3.88	22.46	26.34
DMRC	2.72	57.51	60.23
Others (Temporary, Misuse, Enforcement, DJB etc.)	10.34	176.62	186.95
Total	236.72	2,877.74	3,114.47
Total Revenue Collected	3,098.90		

Table 154:	Revenue	projected	for FY	2011-12	(Rs Cr)
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# AT&C Losses

### **Petitioner's Submission**

5.42 NDPL has estimated the AT&C loss target level at 14% for FY 2011-12.

#### **Commission's Analysis**

- 5.43 The Commission vide Order dated 10<sup>th</sup> May, 2011 has fixed the AT&C loss reduction target of NDPL as 13% for FY 2011-12. The Commission while fixing the targets has taken into consideration the general trend of the trajectory for target loss reduction during the Control Period (FY 07-11) as well as the actual performance claimed by the NDPL during FY 2010-11. The Commission was of the opinion that it is in the public interest to consider the earlier trajectory and fix the target at a level that is lower than the actual achievement during FY 2010-11.
- 5.44 Accordingly, the power purchase requirement for FY 2011-12 has been computed based on the target AT&C loss level of 13%.
- 5.45 The AT&C loss target as submitted by the Petitioner and that approved by the Commission for FY 2011-12 is given below:



	FY 2011-12		
Particulars	Petitioner's Submission	Approved	
AT&C Loss Target	14%	13%	
Collection Efficiency Target	99.50%	99.50%	
Distribution Loss Target	13.57%	12.56%	

Table 155: AT&C Loss Targets for FY 2011-12 (%)

# **Energy Requirement**

### Petitioner's Submission

5.46 The Petitioner has estimated the energy requirement of 7974 MU against the projected sales of 6892 MU for FY 2011-12. The Petitioner has considered T&D loss of 13.57% which is equivalent to the levels estimated for FY 2010-11.

## **Commission's Analysis**

5.47 The Commission has computed the energy requirement for FY 2011-12 as per the approved sales and T&D losses of 12.56%. The approved energy requirement for FY 2011-12 is summarised below:

Stations	Petitioner's Submission	Approved
Sales (in MU)	6892	6932.95
Distribution Losses (%)	13.57%	12.56%
Energy Requirement (in MU)	7974	7929.06

#### Table 156: Approved Energy Requirement for FY 2011-12

# **Power Purchase**

5.48 Under the framework of MYT Regulations power purchase quantum has been classified as an Uncontrollable Component. Since power purchase cost constitutes major component of the total Annual Revenue Requirement of the Petitioner; it is pertinent that the projection of power purchase expense is done with utmost care. Power from all the sources including Central Sector Generating Plants (CSGS), State Generating Plants (SGS), Future Plants, etc is analysed to determine the total power purchase quantum and cost for the Petitioner.

## Allocation of Power from Central and State Generating Stations

## **Petitioner's Submission**

5.49 The Petitioner has submitted that the allocation from Plants Kahalgaon I, Kahalgaon II and Farakka has been reduced to 6.07%, 10.49% and 1.39% from 7.45%, 10.77% and 1.85% respectively by NRPC vide its Order dated 30 March, 2010 and the same has been considered in the projection for FY 2011-12.



- 5.50 The Petitioner has submitted that the unallocated quota from CSGS has been considered as zero as the same is at the discretion of the Central Government.
- 5.51 The Petitioner has submitted that its share in the unallocated quota with the Delhi Govt. Should be increased to 31% as per the sharing formula which is line with the increase in demand in the NDPL area but the GoNCTD has been allocating lower quantity at 23.19%. The Petitioner has requested the Commission to ensure that lower allocation of such allocated data is not continued subsequently. However, the Petitioner for the purpose of projections has considered the current allocation of 23.19%

#### **Commission's Analysis**

- 5.52 Delhi has firm allocated share in Central Sector Generating Stations (CSGS) of National Thermal Power Corporation (NTPC), National Hydroelectric Power Corporation (NHPC), Tehri Hydro Development Corporation (THDC), Satluj Jal Vidyut Nigam Limited (SJVNL) and Nuclear Power Corporation Limited (NPCIL). The Commission has considered allocation of firm power from the above mentioned generating stations as per the allocation specified in the notification no. NRPC/SE(O)/Allocations/2011-12 dated 20 May, 2011 of Northern Regional Power Committee.
- 5.53 The distribution of unallocated quota from the above mentioned plants varies from time to time based on power requirement and power shortages in different States. Therefore, the Commission has considered the unallocated share for the said stations equivalent to the unallocated quota for FY 2010-11 which has arrived based on the total percentage share of each station and percentage allocation of firm share for each station in Delhi for FY 2010-11. The total share is sourced from final REA of March 2011, Notification no NRPC/SE©/ABT-REA/2010-11 dated 29 April, 2011.
- 5.54 The firm share, unallocated share and Delhi's share of firm & unallocated share from the Central Sector Generating Stations is summarised below:

Stations	Installed Capacity (in MW)	Firm Share of Delhi (%)	Unallocated Share of Delhi (%)	Firm & unallocated Delhi Share (%)
NTPC Plants				
ANTA GAS	419.33	10.50%	0.30%	10.80%
AURAIYA GAS	663.36	10.86%	0.21%	11.07%
DADRI GAS	829.78	10.96%	0.14%	11.10%
FARAKKA	1600.00	1.39%	-	1.39%
KAHALGAON –I	840	6.07%	-	6.07%
KAHALGAON-II	1500	10.49%	-	10.49%
NCPP (DADRI THERMAL)-I	840	90%	-	90%
RIHAND –I	1000	10.00%	0.30%	10.30%
RIHAND –II	1000	12.60%	0.30%	12.90%
SINGRAULI	2000	7.50%	0.30%	7.80%

#### Table 157: Allocation of Power to Delhi from Central Sector Generating Stations

Delhi Electricity Regulatory Commission



(Sunita Yadav)

Secretary

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### NORTH DELHI POWER LIMITED

Stations	Installed Capacity (in MW)	Firm Share of Delhi (%)	Unallocated Share of Delhi (%)	Firm & unallocated Delhi Share (%)
UNCHAHAR-I	420	5.71%	0.09%	5.80%
UNCHAHAR-II	420	11.19%	0.30%	11.49%
UNCHAHAR-III	210	13.81%	0.30%	14.11%
DADRI-II	980	75%	-	75%
ARAVALI-JHAJJAR	500	46.20%	-	46.20%
NHPC Plants				
BAIRA SIUL	180	11.00%	-	11.00%
CHAMERA-I	540	7.90%	-	7.90%
CHAMERA-II	300	13.33%	0.36%	13.69%
DHAULIGANGA	280	13.21%	0.30%	13.51%
DULHASTI	390	12.83%	0.30%	13.13%
SALAL	690	11.62%	-	11.62%
TANAKPUR	94.20	12.81%	-	12.81%
URI-I	480	11.04%	-	11.04%
SEWA-II	120	13.33%	0.32%	13.65%
Others				
TEHRI HEP	1000	10.30%	0.20%	10.50%
NJPC (SATLUJ)	1500	9.47%	0.20%	9.67%
TALA HEP	1020	2.94%	-	2.94%
MEJIA # 6	250	11.76%	-	11.76%
NPCIL				
NPCIL - RAPS – 3&4	440	0.00%	0.64%	0.64%
NPCIL - RAPS - 5&6	440	12.69%	0.44%	13.13%
NPCIL – NAPS	440	10.68%	0.29%	10.97%

5.55 Govt. of NCT of Delhi (GoNCTD) through its letter no. F.11 (41)/2007-Power/PF-1/14350 dated 20 May, 2011 has revised the allocation of unallocated power generation share of GoNCTD in Central Power Station (Dadri and BTPS) and Delhi Power Generation Stations (RPH, GT, PPCL) from 1 April, 2011 onwards. According to the above, the allocation of 323.5 MW of unallocated power quota is extended for auxiliary consumption for IP station equivalent to 1 MW. Also, 0.9 MW power which was allocated to Aravali power plant, Jhajjar for construction activities is now available to Delhi as the plant has now become operational. Therefore, 0.9 MW has been equally allocated among three DISCOMs. As per the said letter, the allocation of balance 321.6 MW power quota among distribution companies is reassigned as follows:

DISCOM	Quantum of power
BRPL	39.65% of available power i.e. 127.5 MW +0.3 MW=127.8 MW
BYPL	<ul> <li>a) 30.94% of the available power ie 99.5 MW +0.3 MW= 99.8 MW (From 10.00 A.M to 05.00 P.M)</li> <li>b) 37.16% of the available power ie 119.5 MW +0.3 MW= 119.8 MW (For rest of the time)</li> </ul>
NDPL	23.19% of available power ie 74.5 MW+0.3 MW =74.8 MW



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- 5.56 The unallocated power (15%) from NDMC's share in Dadri, BTPS and Pragati would be at the disposal of the GoNCTD and may be allotted by the Government to the needy DISCOM(s).
- 5.57 If GoNCTD allocates the unallocated power in any manner other than the assumption considered in the preceding paragraphs above, the same shall be accounted for at the time of True-Up of power purchase costs in the subsequent Orders.
- 5.58 The allocation considered by the Commission for projection of power availability from the Delhi Stations is summarised below:

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

#### Table 159: Allocation from Delhi Stations to NDPL

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

<sup>\*\*</sup> Total installed capacity of Dadri is 840 MW, 756 MW allocated to Delhi of which 631MW is allocated to BRPL, BYPL and NDPL. Remaining 125MW is allocated to NDMC.

\*\*\* IP station has been deCommissioned

<sup>#</sup> Total installed capacity of Rajghat is 135MW. However 0.9 MW power was given as construction power to Aravalli Power Project at Jhajhar and 1.0 MW as auxiliary power for IP station

 $^{\#\#}$  The capcity has been derated from 330 MW to 270 MW

*\$ Figures rounded off to zero decimal places* 

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

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

## Energy Availability from the Generating Stations in the Delhi System

## **Petitioner's Submission**

5.59 The Petitioner has submitted the estimates for state GENCOs FY 2011-12 is based on the average actual PLF for FY 2007-08, FY 2008-09, FY 2009-10 and FY 2010-11



for the respective months prorated for NDPL's share in firm as well as unallocated quota.

- 5.60 The Petitioner has submitted that while estimating the power availability from IPGCL Gas Turbine Station, the rated capacity of each of the three units has been derated to 30 MW as has been communicated to NDPL. The Petitioner has further submitted that it has not considered any energy availability from IP station, since the same has been decommissioned w.e.f. 1 November, 09.
- 5.61 The power purchase estimated by the Petitioner from various generating plants in the Delhi system are summarised below:

Plant	Petitioner's Submission
BTPS	1035.42
NCPP (Dadri Thermal)	1416.56
IP Station	0
Rajghat	192.32
Gas Turbine	361.83
Pragati -I	483.10
Total Units	3489.30

#### Table 160: Energy Available to NDPL as per the Petitioner (MU)

## **Commission's Analysis**

- 5.62 The Commission has computed the energy availability from the State Generating Stations i.e. Rajghat, Gas Turbine and PPCL based on the approved PLF and auxiliary consumption in the respective Tariff Order for IPGCL and PPCL stations for FY 2011-12. Availability of IP station has not been considered as the same has been scrapped off w.e.f December, 31, 2009.
- 5.63 For BTPS the energy availability has been computed based on the station PLF taken as an average for the last three Financial Years (FY 2008-09 FY 2009-10, FY 2010-11) and auxiliary consumption as approved in the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009, hereinafter referred to as CERC Tariff Regulations, 2009.
- 5.64 For Dadri-I, the energy availability has been computed based on the station PLF taken as an average for last three Financial Years (FY 2008-09 FY 2009-10, FY 2010-11) and auxiliary consumption as per the CERC Tariff Regulations, 2009.
- 5.65 The effective share of firm and unallocated power from these plants has been applied on the net energy available from each plant to compute the total energy available for the Petitioner in FY 2011-12. The effective share for the Petitioner has been computed based on the allocation of power from Delhi system generating stations discussed earlier under "Allocation of Power from Central and State Generating Stations".
- 5.66 The Commission is of the opinion that actual power availability from the generating stations in Delhi System may vary from the projected units based on the actual units generated and share of the Petitioner in unallocated power. However, since power



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purchase quantum is an uncontrollable parameter and it will be subjected to true up at the end of the year.

5.67 The projected net energy available to the Petitioner during FY 2011-12 from the generating stations in Delhi System is summarised below:

Generating Station	Petitioner's Claim	Approved Availability
BTPS	1035.42	1107.60
NCPP (Dadri Thermal)	1416.56	1356.69
IP Station	0	-
Rajghat	192.38	220.22
Gas Turbine	361.83	484.80
Pragati -I	483.10	508.11
Total Units	3489.30	3677.43

 Table 161: Approved Energy Available from Delhi Generating Stations to NDPL (MU)

#### Energy Availability from the Central Sector Generating Stations

#### **Petitioner's Submission**

- 5.68 The Petitioner has estimated the energy availability from NTPC plants based on the average actual PLF of the plants in last four years (ie. FY 06-07, FY 07-08, FY 08-09 and FY 09-10) for the respective months pro-rated for NDPL's share in firm as well as unallocated quota.
- 5.69 The Petitioner has estimated that the plants running for less than 3 years, the projection has been made based on the actual data available for shorter periods.
- 5.70 In case of hydro stations, the Petitioner has estimated the energy availability based on the month-wise design energy shown by each plant in their respective water studies (as mentioned in CERC Orders). For Tala and Tehri, the average of actual of FY 07-08, FY 08-09, FY 09-10 and FY 10-11 has been considered pro-rated for NDPL's share in firm as well as unallocated quota as the design energy for these two stations was not available.
- 5.71 The energy availability from central generating stations as shown by the Petitioner is detailed hereunder:

Source / Station	Petitioner's Submission
SINGRAULI STPS	319.90
RIHAND STPS-I	218.93
RIHAND STPS-II	288.94
ANTA GPS	79.78
AURIYA GPS	131.02
DADRI GPS	168.23
UNCHAHAAR-I TPS	3.65

 Table 162: Energy Available to NDPL from Central Sector Generating Stations (MU)



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Source / Station	Petitioner's Submission
UNCHAHAAR-II TPS	104.69
UNCHAHAAR-III TPS	64.85
DADRI NCTPS(TH)	1,416.56
BTPS	1,035.42
DADRI (TH.) STAGE II	1,743.89
KOLDAM	8.42
NTPC JHAJJAR	792.13
CLP JHAJJAR	113.83
MAITHON MEDIUM TERM	1082.74
NTPC TOTAL	7622.99
NHPC	
BAIRASUL	25.01
SALAL- I	104.50
TANAKPUR	16.90
CHAMERA -I	38.37
CHAMERA-II	58.34
URI	83.35
DHAULIGANGA	43.74
SEWA II	18.22
DULHASTI	71.39
NHPC-TOTAL	459.82
OTHER STATIONS	
NAPS	42.00
RAPS 5&6	101.79
NJHPS	166.36
TEHRI HPP	79.62
OTHERS TOTAL	389.76
INTER-REGIONAL POWER	
PURCHASE K/GAON 1	80.62
K'GAON-1	80.62
K'GAON-2	229.67
FARAKKA	42.10
TALA HEP	30.82
DVC	325.89
IRPP TOTAL	709.09
TOTAL	9181.66

## **Commission's Analysis**

5.72 The Commission has computed the gross energy available from the existing NTPC stations (except for APCL, Jhajjar and Dadri-II) based on the installed capacity and PLF for each plant which is taken as an average for the last three Financial Years (FY 2008-09, FY 2009-10 and FY 2010-11). Net energy sent out from each plant is



estimated after deducting the auxiliary consumption applicable as per CERC Tariff Regulations, 2009.

- In case of Dadri-II, PLF is considered equal to the availability of FY 2010-11 and 5.73 auxiliary consumption is taken as per CERC Tariff Regulations, 2009.
- 5.74 The installed capacity of APCL, Jhajjar is 1500 MW (3X500 MW), out of three units only one unit was Commissioned in the month of March'11 and it would have been inappropriate to project the PLF based on one month generation, therefore the Commission has taken merit of this fact and assumed PLF for the said station equal to the Normative Availability specified in the CERC Generation Regulations, 2009.
- 5.75 The effective share of the Petitioner from each generating station has been applied to compute the total energy availability from NTPC stations.
- 5.76 Power purchase quantum from NHPC Stations has been computed as per the monthwise design energy shown by each plant in their respective water studies (as mentioned in various CERC Orders) and the auxiliary consumption has been considered as per CERC Tariff Regulations, 2009.
- 5.77 The power availability from other hydro plants like Nathpa Jhakri and Tala HEP has been considered based on the design energy of the respective plants whereas the power availability for Tehri HEP has been considered based on the program energy. The auxiliary consumption has been considered as per CERC Tariff Regulations, 2009.
- 5.78 The Commission has considered energy availability from the NPCIL-NAPS station based on the actual PLF recorded by CEA in its monthly generation report for FY 2010-11, the same has been considered for approving energy availability from NAPS station for FY 2011-12. The auxiliary consumption for NAPS has been considered as given in the MYT Order.
- 5.79 In case of RAPP 3&4 and RAPP 5&6, the Commission has projected the energy availability equivalent to that of FY 2010-11 as unit-wise generation data for RAPP station was not available therefore the same has been arrived at by grossing up the quantum purchased by the Petitioner from RAPP station in FY 2010-11 from Petitioner's share (%) and then Delhi's share (%).
- The effective share of the Petitioner is applied on the energy sent out to estimate the 5.80 energy availability for the Petitioner from respective stations. The energy available to the Petitioner as per the projections made by the Commission is summarised below:

Source / Station	Petitioner's Submission	Approved
<u>NTPC</u>		
ANTA GAS	79.78	76.75
AURAIYA GAS	131.02	131.36
DADRI GAS	168.23	169.11



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Source / Station	Petitioner's Submission	Approved	
FARAKKA	42.10	40.23	
KAHALGAON Stage 1	80.62	84.81	
KAHALGAON Stage 2*	229.67	266.33	
RIHAND-I	218.93	227.86	
RIHAND-II	288.94	300.63	
SINGRAULI	319.90	340.87	
UNCHAHAR-I	53.65	53.56	
UNCHAHAR-II	104.69	106.47	
UNCHAHAR-III	64.85	65.36	
DADRI EXTN 5&6*	1,743.89	1497.29	
ARAVALI POWER CORPORATION LIMITED*	792.13	473.08	
NTPC Total	4318.40	3833.70	
<u>NHPC</u>			
BAIRA SIUL	25.01	24.84	
CHAMERA-I	38.37	37.91	
CHAMERA-II	58.34	59.21	
DHAULIGANGA	43.74	44.20	
DULHASTI	71.39	72.20	
SALAL	104.50	103.46	
TANAKPUR	16.90	16.73	
URI	83.35	82.35	
SEWA-II	18.22	13.38	
NHPC Total	459.82	454.28	
<b>OTHERS</b>			
TEHRI HEP	79.62	84.83	
NJPC (SATLUJ)	166.36	194.67	
TALA HEP	30.82	34.15	
DVC*	325.89	0.00	
MEJIA #6	0.00	198.26	
Others Total	602.69	511.92	
NUCLEAR			
NPCIL – RAPS – 3&4	0.00	5.61	
NPCIL – RAPS – 5&6*	101.79	95.17	
NPCIL – NAPS	42.00	54.77	
Nuclear Total	143.79	155.55	
Total Unit Availability from Central Generating Stations	5524.69	4955.44	

\*Covered by Petitioner under future stations

### **Energy Availability from New Stations**



### **Petitioner's Submission**

5.81 The Petitioner has submitted the availability of energy from the new/future generating stations for FY 2011-12 tabulated as under:

Generating stations	Petitioner's Submission
Dadri Stage II	1743.89
Kahalgaon Stage II	229.67
Koldam	8.42
RAPS 5 & 6	101.79
DVC	325.89
NTPC Jhajjar	792.13
CLP Jhajjar	113.83
Maithon medium term	1082.74
NDPL Generation	476.01
Pragati III	1024.31
Total	2272.85

Table 164: Energy	Availability from nev	v stations projected l	by the Petitioner (MU)
ruble ron Energy	11 anability 11 oni ne,	, stations projected	Jy the remainder (1910)

## **Commission's Analysis**

- 5.82 The Commission has analysed the Petitioner's submission of energy availability from new plants to be commissioned during FY 2011-12 and is of the view that the Petitioner has considered the availability of power from a number of thermal and hydel stations which were due to be Commissioned in FY 2010-11 and FY 2011-12 but the actual COD for these stations may be delayed, hence the Commission vide letter no. F.17(53)/Engg./DERC/2010-11/2039/1254 dated 17 June 2011 requested CEA to provide the details regarding the upcoming plants in FY 2011-12. Subsequently, CEA vide letter CEA/PLG/IRP dated July 11, 2011 provided the list of stations along with installed capacity, Delhi's share and estimated CoD. Therefore, the Commission has considered the latest data made available by the CEA to project energy availability for new stations (except for Maithon, DVC stations and PPCL) for FY 2011-12.
- 5.83 In case of Maithon Unit-I & II, as per the CEA communication the estimated CoD was August'11/September'11 for Unit-I and February'12/March'12 for Unit-II. The Commission while scrutinizing the power purchase bills for the month of April'11 for the Petitioner observed that the power is being received by the Petitioner from the said station. On enquiry, the Petitioner submitted that Maithon station was not operational in April'2011 due to slippages and there is penalty clause under the medium term agreement between DVC and Petitioner after April'2011, therefore DVC to comply to its agreement, is supplying replacement power to the Petitioner. Therefore, the Commission has also considered the energy availability for the said station from April'2011 onwards.
- 5.84 In case of PPCL-III, Bawana station, the Commission based on the latest available data has decided to approve CoD from mid-December'11 and last day of March'12



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for Unit-I and II respectively as against September'11 and February'12 specified by CEA.

- 5.85 The Commission has observed that till date Rithala station is not operational in the combined cycle mode. Accordingly, the Commission has directed the Petitioner that in case the plant continues to generate in open cycle beyond the requirements of trial operation, it is unnecessarily incurring an additional cost and the Commission would not permit capitalisation of the difference between fuel cost and the amount realised at UI rates. Further, the Petitioner shall restrict open cycle generation strictly to the extent required for trial operations of both open cycle and combined cycle, under intimation to SLDC, who would be required to certify that the open cycle operation was strictly in accordance with the requirements of trial operation.
- 5.86 The energy availability from CLP Jhajjar in which only NDPL has a share amongst the Delhi DISCOMs has been approved in line with CoD made available by CEA.
- 5.87 For projection of energy availability from DVC stations, the Commission vide letter no. F17(165)/Engg/DERC/2011-12/CF.2938/1609 dated 8 July, 2011 requested DVC to provide the details of the stations from which Delhi DISCOMs will be receiving power. DVC vide letter Coml/DERC/2011-12/Tariff/5161 dated July 15, 2011 provided the list of stations along with the anticipated energy available to Delhi during FY 2011-12. The Commission has considered the same for projecting the energy availability from DVC stations for FY 2011-12.
- 5.88 The Commission has considered energy availability from new generating stations based on 85% availability for thermal and gas plants. For hydel stations, the Commission has considered the Capacity Utilisation Factor (CUF) at 45%. Since the generation for hydel stations vary in each month of the year and the monthly design energy for new plants is not available therefore, to estimate the monthly power availability from new hydro stations, the Commission has applied the percentages which have been arrived at by taking the monthly design energy for existing stations over the annual design energy for the same stations.
- 5.89 Auxiliary consumption for new stations has been considered in line with the CERC tariff regulations, 2009-14.
- 5.90 The effective share of the Petitioner as per the reassignment Order (Order No. F.11 (41)/2007-power/PF-1/1430 dated 20 May, 2011) has been applied on the ex-bus generation from all future stations to estimate the total energy purchases from the respective NTPC, NHPC, DVC and other stations for FY 2011-12.
- 5.91 The energy available to the Petitioner as per the revised projections by the Commission for FY 2011-12 from the new stations is summarised below:

 Table 165: Energy Available from Future Stations as Approved by the Commission (MU)



### NORTH DELHI POWER LIMITED

## **Tariff Order for FY 2011-12**

S. No.	Plant	Owning Agency	Submitted by Petitioner	Approved energy availability	Approved CoD
1	APCL, Jhajjar	NTPC	792.13	117.62	Unit-1: Considered under existing stations, Unit-II: Jan'12, Unit-III: Beyond March'12
2	Maithon TPS		1082.74	1052.46	Unit-I:April'11 Unit-II:April'11
3	Mejia-II			820.10	As per DVC Letter
4	Chandrapura	DVC	225 90*	359.96	As per DVC Letter
5	Koderma TPS		325.89*	-	Beyond March'12
6	Durgapur			-	Beyond March'12
7	Chamera-III		-	4.22	Unit-1 & 2: December'11; Unit-3: February'12
8	NDPL Generation	NHPC	476.01	-	NA
9	Uri –II		-	3.27	Unit-1 & 2: December'11; Unit-3: February'12
10	Koteshwar	THDC	-	24.13	Unit 1: April'11 Unit-2:April'11 Unit-3: December'11 Unit-4: March'12
11	Pragati -III, Bawana	SGS	1024.31	180.47	Module 1: December'11 Module 2:March'12
12	CLP Jhajjar	HPGCL & Reliance (JV)	113.83	39.03	Unit-1 March'12, Unit-2: beyond March'12
	Total	· · ·	3814.91	2601.25	-

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

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

#### **Petitioner's Submission**

- 5.92 The Petitioner has submitted that it makes Bilateral arrangements such as direct purchases as well as banking arrangements to balance its energy requirement as 100% long term tie-ups for meeting the peak load demand for full year is not an economical viable proposition. The Petitioner has further submitted that, short term arrangements need to be made to balance the demand and supply on day to day and that too on 15 minutes time intervals basis.
- 5.93 The projected units purchase and sale from other sources is tabulated as under:

Table 166: Power purchase quantum from other sources	s projected by the Petitioner (MU)
--	------------------------------------

Other Sources	Petitioner's Submission		
<b>Power Purchase from Other Sources</b>			
Inter-State Bilateral Purchase	138.70		
Intra-State Power Purchase	-		
Power Sold to Other Sources			
Intra State Power sale (including Banking sale)	(3352.10)		



### **Commission's Analysis**

- 5.94 Based on the analysis of energy availability from various sources and the requirement of power for sale in the distribution area of the Petitioner, the Commission is of the view that the Petitioner would have an overall surplus power for sale to others in FY 2011-12.
- 5.95 The Commission has considered the quantum of power to be purchased through intrastate purchases during FY 2011-12 to be nil.
- 5.96 The Commission has assumed that the surplus power available to the Petitioner will be sold entirely under bilateral arrangements for FY 2011-12.
- 5.97 The Commission has considered that the energy which will be banked through forward banking, same day banking, same day/ day ahead trading in energy exchange and forward trading, if any, in FY 2011-12 will be accounted for at the time of True-Up exercise. The units purchased and sold through other sources are summarised below:

Other Sources	Petitioner's Submission	Approved	
Power Purchase from other Sources			
Intra State Power Purchase		-	
Inter-state Bilateral Purchase	138.70	-	
Banking Purchase	0	-	
UI Purchase	0	-	
Other Purchases Total	138.70	-	
Power Sold to other Sources		-	
Intra State Power Sale	(3352.10)	-	
Banking Sale	(3352.10)	2770.58	
UI Sale		_	
Other Sales Total	(3213.4)	2770.58	

#### Table 167: Energy Purchase /Sales through Other Sources for FY 2011-12 (MU)

## **Power Purchase Cost**

#### **Cost of Power Purchase from Existing Stations**

## **Petitioner's Submission**

- The Petitioner has made the following assumptions for estimating the power purchase 5.98 cost from existing stations for FY 2011-12:
  - (a) The Fixed Costs of various power plants for FY 2011-12 have been considered based on the tariff petition submitted by the respective stations to CERC according to the new regulations issued by CERC.
  - (b) In case of Kahalgaon-I and NJPC, where no petition is available, the fixed cost is calculated as per new tariff regulations, 2009-14.



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- (c) In case of state GENCOs, the variable cost for thermal and gas stations has been escalated by 5% on the base rate of FY 2010-11 to reach the values for FY 2011-12.
- (d) The income tax for various plants has been computed as "ROE x NDPL Share x Tax Rate (32.45)" as per new Regulations.
- (e) The demand has been increased by 8% on the demand of FY 2010-11 to calculate the demand for FY 2011-12.
- 5.99 The Power purchase cost submitted by the Petitioner is detailed hereunder;

Table 168: Proposed Power Purchase Cost for Existing Stations (Rs. Cr)

Source / Station	Petitioner's Submission
SINGRAULI STPS	64.37
RIHAND STPS-I	47.85
RIHAND STPS-II	68.84
ANTA GPS	32.82
AURIYA GPS	49.29
DADRI GPS	61.46
UNCHAHAAR-I TPS	15.67
UNCHAHAAR-II TPS	32.34
UNCHAHAAR-III TPS	22.30
DADRI NCTPS(TH)	479.64
BTPS	439.83
DADRI (TH.) STAGE II	662.68
KOLDAM	2.95
NTPC JHAJJAR	301.01
CLP JHAJJAR	34.72
MAITHON MEDIUM TERM	376.79
NTPC TOTAL	2,692.55
NHPC	
BAIRASUL	3.74
SALAL- I	12.20
TANAKPUR	3.70
CHAMERA -I	6.70
CHAMERA-II	8.11
URI	15.29
DHAULIGANGA	13.32
SEWA II	7.60
DULHASTI	39.53
NHPC-TOTAL	120.16
OTHER STATIONS	
NAPS	8.57
RAPS 5&6	30.13
NJHPS	44.16



Source / Station	Petitioner's Submission
TEHRI HPP	39.20
OTHERS TOTAL	122.06
<b>INTER-REGIONAL POWER</b>	
K'GAON-1	24.78
K'GAON-2	80.14
FARAKKA	15.98
TALA HEP	5.67
DVC	114.06
IRPP TOTAL	240.63
STATE GENCOS	
IP	-
RPH	66.26
PPCL	135.77
GT	140.43
NDPL GENERATION	209.44
PRAGATI III	460.94
STATE GENCOS TOTAL	1,012.84
TOTAL	4188.25

#### **Commission's Analysis**

- 5.100 The following methodology has been adopted by the Commission for estimation of the power purchase cost for FY 2011-12 from existing stations:
  - (a) The Commission has projected the variable cost for NTPC stations based on the average of the variable cost and FPA submitted by BRPL, BYPL and NDPL for FY 2010-11 as additional information.
  - (b) The fixed charges for NTPC stations (except for APCL and Dadri Extn Unit 5 & 6) has been taken from the provisional Tariff Orders issued by CERC on July 6, 2011.
  - (c) The Commission has considered fixed charges for APCL, Jhajjar based on the Petition filed by it for Unit-I and Unit-II.
  - (d) In case of Dadri Extn 5&6, the Tariff Order was not released by CERC till the issuance of this Order. Therefore, the Commission has considered the fixed cost as per March'2011 bills which is then grossed by Petitioner's share and Delhi's share to arrive at the annual cost for FY 2011-12.
  - (e) While projecting the power purchase cost for NTPC stations, the Commission has also taken into consideration the water cess being paid by the Petitioner as per the March bills.



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- (f) By the time the Commission was scrutinizing the tariff petition filed by the Petitioner, the Tariff Orders for most of the NHPC stations were issued by CERC (except Chamera-II). Therefore, the Commission found merit in approving the annual fixed charges as per the latest order for the stations for which the order was passed by CERC. For Chamera-II, the Commission has approved the annual fixed charges and income tax as per the power purchase bills for the month of March'11.
- The Commission has considered the normative availability for hydel stations (g) as per the CERC, 'Terms and conditions of Tariff regulations, 2009' and allowed the fixed cost based on the same.
- (h) The fixed and variable cost for state generating stations has been considered as per the Tariff Order issued by the Commission for FY 2011-12.
- (i) The Commission has considered the actual single part tariff of NPCIL plants. For NAPS, the Commission has considered the rate as per May'2011 bills raised by NPCIL and for RAPS 3&4 and RAPS 5&6, as per the bills raised by NPCIL for the month of May'2011.
- The Commission for approving the annual fixed charges for Tehri HEP has (j) considered the formula given in the March'2011 bills raised by THDC.
- The Commission has considered single part tariff for TALA HEP at Rs (k) 1.84/kWh. Based on the power purchase bill raised by PTC for the month of March'11.
- (1) In case of Mejia unit-6, single part tariff of Rs 3.40/Kwh is considered as is taken for other future stations of DVC.
- The Commission has computed the total power purchase cost considering (m) fixed cost, variable cost (including FPA) and other charges (income tax, water cess etc) for each plant taking into account the approved energy availability and share of the Petitioner.
- 5.101 The total power purchase cost computed by the Commission is summarised below:

Source	Quantum (MUs)	Fixed cost (Rs Cr)	Variable cost* (Rs Cr)	Others# (Rs Cr)	Total (Rs Cr)
<b>Central Generating Stations</b>					
NTPC					
ANTA GAS	76.75	5.98	18.67	0.04	24.69
AURAIYA GAS	131.36	7.39	30.44	0.00	37.83
DADRI GAS	169.11	9.07	38.52	0.00	47.58
FARAKKA	40.23	3.36	11.56	0.01	14.93
KAHALGAON-I	84.81	8.99	18.39	0.01	27.39
RIHAND –I	227.86	15.12	30.31	0.08	45.51

#### Table 169: Approved Total Power Purchase Cost for Existing Stations (Rs. Cr)



## NORTH DELHI POWER LIMITED

Source	Quantum (MUs)	Fixed cost (Rs Cr)	Variable cost* (Rs Cr)	Others# (Rs Cr)	Total (Rs Cr)
RIHAND –II	300.63	24.09	42.16	0.00	66.26
SINGRAULI	340.87	15.52	46.64	0.11	62.27
UNCHAHAR-I	53.56	3.98	10.49	0.01	14.48
UNCHAHAR-II	106.47	9.25	20.75	0.02	30.01
UNCHAHAR-III	65.36	8.22	12.68	0.01	20.91
KAHALGAON STAGE-II	266.33	35.72	55.33	0.01	91.06
DADRI Extn Unit 5&6	1497.29	179.69	329.03	0.00	508.72
ARAVALI POWER CORPORATION LIMITED, UNIT-1	473.08	99.13	126.21	0.00	225.34
NTPC Total	3833.70	425.50	791.17	0.30	1216.97
NHPC					
BAIRA SIUL	24.84	1.70	1.70	0.00	3.39
CHAMERA-I	37.91	3.35	3.35	0.00	6.69
CHAMERA-II	59.21	7.92	7.92	0.95	16.78
DHAULIGANGA	44.20	6.05	6.05	0.00	12.11
DULHASTI	72.20	21.29	21.29	0.00	42.58
SALAL	103.46	4.49	4.49	0.00	8.98
TANAKPUR	16.73	1.72	1.72	0.00	3.45
URI	82.35	6.02	6.02	0.00	12.03
SEWAII	13.38	4.44	4.44	0.00	8.88
NHPC Total	454.28	56.97	56.97	0.95	114.89
Other stations					
TEHRI HEP	84.83	11.44	10.35	0.00	21.79
NJPC (SATLUJ)	194.67	21.04	21.04	0.00	42.07
TALA HEP	34.15	0.00	6.28	0.00	6.28
MEJIA TPS (Unit 6)	198.26	0.00	67.41	0.00	67.41
Others Total	511.92	32.47	105.08	0.00	137.55
NUCLEAR					
NPCIL - RAPS – 3&4	5.61	0.00	1.34	0.00	1.34
NPCIL - RAPS – 5&6	95.17	0.00	28.74	0.00	28.74
NPCIL – NAPS	54.77	0.00	11.18	0.00	11.18
Nuclear Total	155.55	0.00	41.26	0.00	41.26
Generating Stations in Delhi					
BTPS	1107.60	92.03	350.57	0.00	442.60
NCPP	1356.69	99.51	324.60	0.14	424.25
IP Station	0.00	0.00	0.00	0.00	0.00
Rajghat	220.22	52.49	53.69	0.00	106.18
GAS TURBINE	484.80	57.65	147.01	0.00	204.66
Pragati -I	508.11	56.14	94.41	0.00	150.55
SGS Total	3677.43	357.82	970.28	0.14	1328.23
Total Cost	8632.88	872.77	1964.76	1.39	2838.91

\*including FPA #including water cess and tax, wherever applicable



### **Cost of Power from New Generation Stations**

#### **Petitioner's Submission**

5.102 The Petitioner has submitted that the unit cost of new generating plants at 85% PLF has been estimated as under:

Plant	Particulars	1	<b>Fariff</b>
Dadri (Th.) Stage II	Full Year	380	paise/unit
Koldam	March'12	350	paise/unit
NTPC Jhajjar	U 1 in March'11, U2 in Sept'11, U3 in April'12	380	paise/unit
CLP Jhajjar	U1 in Jan'11	305	paise/unit
Maithon Medium term	Apr'11	358	paise/unit
Sewa-II	Full Year (Rate as per Tariff Order)	417	paise/unit
RAPP 5&6	Full Year	296	paise/unit
DVC	Apr-Sep 67 MW/Oct-Mar 117 MW	350	paise/unit
NDPL Generation	CoD in Apr'11	440	paise/unit
Pragati III	Block 1 in Jul'1, U2 in Nov'11	450	paise/unit

#### Table 170: Projected Power Purchase Tariff for New Stations

#### **Commission's Analysis**

- 5.103 The Commission has considered the power purchase cost for the following new generating stations as under:
  - (a) In case of Pragati-III, the Commission has considered the power purchase rate as 407 paisa based on the Tariff Petition filed by PPCL and assuming that fuel requirement is met from the KG basin.
  - (b) In case of Maithon TPS, the Commission has considered the power purchase cost as Rs 3.58 per unit as per information provided by the Petitioner.
  - (c) In case of NTPC Jhajhar plant, Unit-II (Aravali Power Corporation Ltd.), the Commission has considered the annual fixed cost based on the Tariff Petition filed by APCL before CERC and the variable cost as approved by the Commission for APCL, Unit-I (under existing stations).
  - (d) In case of CLP Jhajjar, the rate has been assumed at Rs 3.35/kWh based on the information available to Commission.
- 5.104 For NHPC hydro plants, Rs. 3.50 per unit has been assumed for computing the power purchase cost for FY 2011-12.
- 5.105 In the absence of definite tariff for power available from DVC plants (incl Mejia unit 6), the Commission has considered single part tariff of Rs. 3.40 per unit for the power procured from the DVC plants during FY 2011-12.



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- 5.106 For Maithon station, the Commission has considered power purchase rate of Rs 3.58/kWh considering the PPA and Fuel Price Adjustment (FPA)for projecting the power purchase cost for FY 2011-12.
- 5.107 The Commission is of the view that the power purchase cost as considered from new plants may vary and will be subject to True-Up based on the actual cost at the end of FY 2011-12.

Source	Quantum (MUs)	Fixed cost (Rs Cr)	Variable cost (Rs Cr)	Total (Rs Cr)
APCL, Jhajjar	117.62	20.86	31.38	52.24
Chamera-III	4.22	0.00	1.48	1.48
Uri-II	3.27	0.00	1.14	1.14
Mejia TPS (Unit 7&8)	820.10	0.00	278.83	278.83
Chandrapura	359.96	0.00	122.38	122.38
Maithon	1,052.46	0.00	376.78	376.78
Koteshwar	24.13	0.00	8.45	8.45
PPCl, Bawana	180.47	0.00	73.45	73.45
CLP Jhajjar	39.03	0.00	13.07	13.07
Total	2601.25	20.86	906.97	927.83

 Table 171: Approved Power Purchase Cost for New Generation Stations (Rs. Cr)

### Cost of Power from Other Sources

## **Petitioner's Submission**

- 5.108 The Petitioner has estimated surplus power for the period for the period FY 2011-12 majorly due to upcoming power plants in future. The Petitioner has submitted that the surplus power will be sold through tender at the rate of Rs 2.90/unit which is equal to the actual sale rate for the year FY 2010-11 (as per audited figures from April 10 to December 10).
- 5.109 The Petitioner has further submitted that even after selling the surplus power, if the availability is found to be greater than demand, then such surplus is expected to be left to UI and rate of such power is estimated to be equal to Rs 2.90/unit which is equal to the actual sale rate for the year FY 2010-11 (as per audited figures from April 10 to December 10).
- 5.110 The Petitioner has stated that the sale proceeds shall go entirely towards reducing the net power purchase cost charged to NDPL consumers.

## **Commission's Analysis**

5.111 The Commission has considered that there will be no requirement of power purchase for meeting the seasonal demand in the Petitioner's area of operation through intrastate purchase.



5.112 For the sale of surplus power entirely under the bilateral arrangements by the Petitioner, the Commission has considered a rate of Rs 3.60 per unit during FY 2011-12, which is equal to the average rate of bilateral power sold for DISCOMs (BRPL, BYPL and NDPL) as a whole from Apr'10- March'11.

Particulars	Petitioner's Submission	Approved
Power Purchase from other Sources		
Intra State Power Purchase	0	-
Inter-state Bilateral Purchase	74.22	
Banking Purchase		-
UI Purchase		-
Other Purchases Total		
Power Sold to other Sources		-
Intra State Power Sale	(079.00)	997.37
Banking Sale	(978.90)	-
UI Sale		-
Other Sales Total	(904.68)	997.37

 Table 172: Approved Cost of Power Purchase/Sale through Other Sources (Rs. Cr)

\*Includes banking sale

#### Transmission Losses and Charges

#### **Petitioner's Submission**

- 5.113 The Petitioner has projected Inter-state transmission losses (PGCIL losses) for FY 2011-12 at 4% for entire energy received from plants located in Northern Region and another 3% for units received from plants located in Eastern Region based on the actual bills received in the past.
- 5.114 The Petitioner has projected Intra-state transmission losses at 1.5% based on the Minutes of the Meeting held on 19 June 2008 in SLDC.
- 5.115 The Petitioner has projected transmission losses on banking /sale transactions as under:
  - (a) Banking Export/ Sale: Only Intra-state Losses of 1.5% have been considered.
  - (b) Banking Import: Intra-state Losses of 1.5% and additional Regional Losses have been considered.
- 5.116 The Petitioner has submitted that the transmission charges for FY 2011-12 have been computed by taking 5% escalation on the actual cost of transmission for FY 2010-11 (till February' 2011).
- 5.117 The Petitioner has submitted that Transmission Charges for DTL have been calculated by taking 5% escalation on the amount approved by the Hon'ble Commission in its MYT Order.



- 5.118 The Petitioner has further submitted that another Rs. 0.49 Cr has been considered as NDPL's share for BBMB charges based on the Hon'ble Commission's Order.
- 5.119 It has been submitted by the Petitioner that Service tax on Transmission is being claimed by the Service Tax Department and in the event of the same being payable, it shall be claimed separately for the relevant periods.
- 5.120 The Petitioner has submitted that aggrieved by the Order of the Commission issued on 12.11.2009, the Petitioner had preferred an appeal before Hon'ble ATE on 31<sup>st</sup> May 2010. The Commission had allowed the truing up of power purchase cost of Delhi Transco Limited (DTL) for FY 05-06 and had directed that the Petitioner will have to bear these additional expenses. The Petitioner had further stated that the Hon'ble ATE has held in its judgement that the same will be allowed in the ARR along with the short-term PLR of SBI. Therefore, the Petitioner has requested the Commission to allow its share of Rs 31.97 Crs in the ARR.

#### **Commission's Analysis**

- 5.121 The Commission has considered the eastern region losses based on the average of the weekly losses reported by ERPC on its website from April 1, 2010 to March 27, 2011 at 2.43% and the losses for the northern region have considered based the average of the weekly losses at 3.69%, reported on the NRPC website from June21, 2010 to March 27, 2011.
- 5.122 The intra-state transmission losses of 1.28% have been approved based on the actual losses for FY 2010-11 reported by Delhi Transco Limited vide letter no. F.DTL/203/10-11/Opr (Comm)/F-1/33 dated 13 May 2011.
- 5.123 Recently, CERC has issued 'Determination of POC rates and transmission losses in accordance with Regulation 17(2) of Central Electricity Regulatory Commission (sharing of inter-state transmission charges and losses) Regulations, 2010 but at this juncture, it is very difficult to gauge its impact therefore, the Commission has allowed inter-state transmission charges by considering an escalation factor of 5% on the actual transmission charges submitted by the Petitioner for FY 2010-11.
- 5.124 The intra-state transmission charges have been allowed based on the ARR approved by the Commission for Delhi Transco Limited (DTL) for FY 2011-12.
- 5.125 The impact of Hon'ble ATE judgement has been dealt in detail in the True-Up Chapter of FY 2009-10.
- 5.126 The PGCIL and DTL transmission losses and the cost is summarised below:

Table 173: Approved Transmission Losses and Charges for the Petitioner for FY 2011-12

Particulars	Petitioner's Submission	
Transmission Losses (in MU)		
Inter-State (PGCIL)	359.37	395.75
Intra-State (DTL)	172.48	138.73



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Particulars	Petitioner's Submission	Approved
Total Transmission Losses	531.85	534.48
Transmission Charges (Rs. Cr)		
Inter-State (PGCIL)	192.19	140.54
Intra-State (DTL)	114.62	308.77
Total Transmission Charges	294.57	449.31

# **Energy Balance**

5.127 Total power purchase for FY 2011-12 as approved by the Commission is summarised below:

	Petition	Petitioner's Submission			Now Approved		
Particulars	Units (MU)	Total Cost (Rs. Cr)	Avg Cost*	Units (MU)	Total Cost (Rs. Cr)	Avg Cost*	
Power Purchase from CSGS <sup>#</sup>	9646.55	3405.96	3.53	8913.39	2862.75	3.21	
Inter-State Bilateral Purchase	138.70	74.22	5.35	0.00			
Banking purchase				0.00			
UI purchase				0.00			
PGCIL losses	359.37			395.75			
Power purchase from Delhi Stations <sup>\$</sup>	2073	782	3.77	2320.74	903.98	3.90	
Intra-State Power Purchase				0.00			
Power Available at Delhi Periphery	11,498.62	4,262.47	3.71	10838.37	3766.74	3.48	
DTL loss	172.48			138.73			
Power available to DISCOM	11,326.14	4,262.47	3.76	10699.64	3766.74	3.52	
Sales	6892.13			6932.95			
Distribution loss	1082.0718			996.11			
Required Power	7974	3283.56	4.12	7929.06	2769.37	3.49	
Surplus/ (Deficit) Power available at DISCOM Boundary	3352.10	978.90	2.92	2770.58	997.37	3.60	

#### Table 174: Energy Balance for the FY 2011-12

\* Average cost in Rs per unit # Includes NTPC (except BTPS), NHPC, SJVNL, THDC, NPCIL, Dadri TPS, and Future Stations <sup>\$</sup> Includes BTPS, PPCL, IP Stations, Rajghat and GTPS



# **Fuel Price Adjustment Surcharge**

- 5.128 The Distribution Licensees procure power from central generating stations, state generating stations through the long-term power purchase agreements and through short-term purchases. The power purchase cost accounts for about 80% of Annual Revenue Requirement of the distribution licensees and includes the cost paid for procurement of power, transmission charges, UI charges, SLDC/RLDC charges. The net power purchase cost after deducting amounts realized from sale of surplus power is considered for purpose of ARR.
- 5.129 The Commission recognizes that the power purchase costs are uncontrollable in nature and are volatile making it difficult to accurately estimate power purchase costs at the time of annual tariff fixation. The power purchase cost is beyond the control of distribution licensees and dependent upon following factors:
  - (a) Price of Fuel (Coal/Gas) which are highly unpredictable as has been seen from the data of past few years.
  - (b) Availability of power from new sources.
  - (c) Weather conditions such as extreme harsh summers/cold which have direct impact on the demand.
  - (d) Demand supply gap of power within the country.
- 5.130 Any fluctuation in the cost of fuel is a pass through for the generator through a fuel price adjustment formula and is payable by the distribution licensees in their monthly bills.
- 5.131 However, power purchase cost being uncontrollable, in nature, is pass-through to the consumers but the difference in actual cost of procurement of power and the estimated cost of purchase of power gets trued up only after 2 years. The time lag of two years puts additional burden on consumers by way of interest charges which have to be borne by the consumers, additionally.
- 5.132 The Commission vide its Order dated August 26, 2011 in Petition Nos 22/2010, 23/2010 and 24/2010 has given the Fuel Price Adjustment mechanism on quarterly basis for thermal power generating stations having long-term PPAs with distribution licensees of Delhi. The Distribution licensee is allowed to adjust the difference between the actual variable fuel cost and variable fuel cost approved in the Tariff Order for the Financial Year on a quarterly basis, in respect of thermal power stations having long term power purchase agreements and listed in Table 175. The Fuel Price Adjustment would be done according to the formula given below:



### **Quarterly Fuel Price Adjustment (FPA)**

FPA n <sup>th</sup> quarter (%) =	100 x	Average Rate of FPA nth quarter (Rs./kWh)	qu	otal units procured in (n-1)th aarter (Kwh) from thermal ower stations as given in Table 5
		theft, arrears, LI	PSC, E-ta th quart	illed (excluding fixed charges, ax etc.) to all consumers of the er (Rs.) as certified by the
Where,				
VC - Variable Cost	/Charges bi	lled by the gener	ating cor	mpanies for the concerned
power station for the	relevant per	iod		
Average Rate of FPA	nth Qtr. (R	s. /Kwh) = Avg. V	/C (n-1)	th Qtr. (Rs. /Kwh) –
		Av	g.VC (B	ase) (Rs. /Kwh)
Avg. VC (n-1)th Qtr.	1	unit in (n-1)th Q ants as given in, Ta	-	its procured from respective n (n-1)th Quarter
= (Rs./Kwh)	Total units in (n-1)th	-	l thermal	stations as given in Table 175
Avg. VC (Base). = (Rs./Kwh)		average variable ble below as appro		all thermal power stations as Fariff Order

Note (1)\*:For determining the Total Energy Charges, bills raised during the quarter will only be considered, regardless of billing cycle and there shall be no pro rata adjustments due to actual date of meter reading.

Name of the Station	Quantum	Variable Cost (Rs Cr)	Variable Charge (Rs/unit)
ANTA GAS	169.11	38.52	2.28
AURAIYA GAS	40.23	11.56	2.87
DADRI GAS	84.81	18.39	2.17
FARAKKA	1356.69	324.60	2.39
KAHALGAON-I	227.86	30.31	1.33
NCTPS (Dadri)	300.63	42.16	1.40
RIHAND –I	340.87	46.64	1.37
RIHAND –II	53.56	10.49	1.96

Table 175:	Schedule – I	Base Variable	Cost FY 2011-12
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Name of the Station	Quantum	Variable Cost (Rs Cr)	Variable Charge (Rs/unit)
SINGRAULI	106.47	20.75	1.95
UNCHAHAR-I	65.36	12.68	1.94
UNCHAHAR-II	1497.29	329.03	2.20
UNCHAHAR-III	266.33	55.33	2.08
Dadri Ext. unit 5&6	473.08	126.21	2.67
KAHALGAON STAGE-II	169.11	38.52	2.28
Aravali Power Corporation Ltd (Unit - 1)	40.23	11.56	2.87
Rajghat	220.22	53.69	2.44
GAS TURBINE	484.80	147.01	3.03
Pragati -I	508.11	94.41	1.86
BTPS	1107.60	350.57	3.17
Total of all stations	7511.13	1761.45	2.35

- 5.133 In order to give effect to the Fuel Price Adjustment (FPA) on quarterly basis the following be implemented:
  - (a) The FPA will be charged to all categories of consumers.
  - (b) The FPA for any quarter would be charged only after it is approved by the Commission.
  - (c) The weighted average base variable cost in Rs./Kwh shall be as approved in the Tariff Order for FY 2011-12, (August, 2011) as given below.

NDPL = Rs. 2.35\*

\*detailed computation is given in Table 175 above for NDPL. The Schedule will be revised in every subsequent Tariff Order

- (d) The Distribution licensee shall submit to the Commission the details in respect of changes in Variable Cost of the thermal plants listed in for (n-1)th quarter. Further, Auditor's Certificate along with statement indicating plant-wise details of Variable Charges and units purchased from each thermal plant listed in for (n-1)th quarter shall be furnished along with the proposal of FPA submitted for the Commission's approval.
- (e) The percentage of FPA will be rounded off to two decimal places.
- (f) The percentage increase on account of FPA will be applied as a surcharge on the total energy charges (excluding fixed charges, theft bills, arrears, LPSC, E. Tax etc.) billed to a consumer of the utility.
- (g) Auditors Certificate for the total energy charges billed as above for all consumers of the utility in (n-1)th quarter shall be furnished along with the proposal of FPA submitted for the Commission's approval.



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- (h) The distribution utility shall separately get the quarterly form 2.1 (a) duly certified by the Statutory Auditor.
- (i) The bill format shall clearly identify the FPA percentage and amount of FPA billed as separate entries.
- (j) The FPA calculated for any quarter shall be applied prospectively for 3 months after approval is received from the Commission.
- (k) In view of the fact that FPA computed for any quarter will be applied after a time delay for a subsequent 3-month period, there would necessarily be a difference between the actual fuel cost increase and the recovery by the distribution utility through the quarterly adjustments. The difference will be adjusted at the time of annual True-Up undertaken by the Commission for that year.
- 5.134 This Fuel Price Adjustment (FPA) formula shall remain applicable till it is amended, reviewed, revised or otherwise amended.

# **Controllable Parameters**

- 5.135 The Petitioner has 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 FY 2011-12.
- 5.136 All other costs including O&M Costs have been projected in the MYT Order dated February 23, 2008 for each year of the Control Period (FY 2007-08 to FY 2010-11). The Commission has now extended the MYT Regulations till FY 2011-12. As the MYT Order issued by the Commission has not approved any cost towards controllable parameters for FY 2011-12, the Commission in this Order is approving costs towards various controllable parameters following the principles laid out in the MYT Regulations, 2007 and MYT Order dated February 23, 2008.

# **Operation & Maintenance Expenses**

## **Employee Expenses**

## **Petitioner's Submission**

- 5.137 The Petitioner has submitted actual employee expenses incurred by it in FY 2009-10 and the provisional employee expenses for FY 2010-11 including salaries, dearness and other allowances, ex-gratia payments, contribution towards terminal benefits etc. The employee expenses for the FY 2010-11 have been escalated by 10% annually for estimating the employee expenses for non-FRSR employees for FY 2011-12.
- 5.138 The Petitioner has also submitted additional expenses on account of revision of escalation index and salary of FRSR employees for the Control Period (FY 2007-08 to FY 2011-12) as per 6<sup>th</sup> Pay Commission recommendations. The Petitioner has



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submitted that the  $6^{th}$  Pay recommendations have been implemented in the month of October 2009 and w.e.f. 01.01.2006.

- 5.139 The Petitioner has submitted the Net Employee Expenses as Rs. 306.31 Cr for FY 2011-12.
- 5.140 The Petitioner has allocated the net employee cost into Wheeling and Retail Supply business using the following approach:
  - (a) The Petitioner has first allocated the employee cost projected for FY 2011-12 into the different employee functions in the following ratio.

Functions	Allocation
Administration	50.39%
System	4.93%
Direct Districts	24.96%
Street Light	0.51%
Billing & Metering	12.39%
Commercial/Enforcement	0.00%
Bonus (Exgratia)	0.00%
Gratuity	0.00%
VSS/ VRS	6.75%
Cenpeid	0.08%

Table 176: Allocation of Employe	a Cost into different functions
Table 1/0: Anocation of Employe	e Cost into anterent functions

(b) The Petitioner has, thereafter, allocated the employee cost apportioned to different employee functions between Wheeling Business and Retail Supply Business in the following manner:

Table 177: Allocation of Employee Cost between Wheeling & Retail Supply Business

Functions	Wheeling	<b>Retail Supply</b>
Administration	60%	40%
System	100%	0%
Direct Districts	100%	0%
Street Light	0%	100%
Billing & Metering	0%	100%
Cenpeid	60%	40%

5.141 The summary of net employee cost allocated to Wheeling and Retail Supply business as proposed by the Petitioner is as follows:

Particulars	FY12
Wheeling	197.64
Retail Supply	108.67



## Commission's View

5.142 The Commission has determined the employee expenses of the Petitioner for the Control Period using the methodology detailed in the MYT Regulations, 2007. As per the MYT Regulations;

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

- 5.143 Hence, the employee expenses for the nth year (FY 2011-12) of the Control Period (EMP<sub>n</sub>) shall be determined using the employee expenses for the  $(n-1)^{th}$  year (FY 2010-11) (EMP<sub>n-1</sub>) and the applicable escalation factor.
- 5.144 The Commission in this Order has revised the Employee expense for each year of the Control Period on account of implementation of the 6<sup>th</sup> Pay Commission Recommendation for DVB employees in Para 3.115-3.123.
- 5.145 While revising the Employee Expense for the Control Period (FY 2007-08 to FY 2011-12), the Commission has considered the following methodology (detailed in Chapter A3 of this Order):
  - (a) The employee expense for the base year (FY 2006-07) has been revised by the amount of Sixth Pay Commission impact pertaining to FY 2006-07, as submitted by the Petitioner.
  - (b) The revised base year salary has been escalated as per the escalation factors mentioned in Table 52 to arrive at the employee expenses for the Control Period (FY 2007-08 to FY 2011-12).
  - (c) All arrears (including additional allowances paid in FY 2008-09 and FY 2010-11) due to salary revision for the period FY 2005-06 to FY 2009-10 is assumed to have been paid in FY 2009-10 (except for an interim amount that has already been paid in FY 2008-09).
  - (d) For the purpose of projecting Employee Expense for FY 2010-11, revised Employee Expenses for FY 2010-11 has been considered. For the new allowances which became applicable from FY 2008-09, escalation factor has been applied on the actual allowances paid by the Petitioner in FY 2009-10 to arrive at the new allowances for FY 2010-11.
  - (e) The total Employee Expenses (including new allowances) has been escalated by the escalation factor to arrive at the Employee expenses for FY 2011-12.
- 5.146 The Petitioner has proposed Rs 6.75 Cr as SVRS Pension Expense for FY 2011-12.
- 5.147 The Commission, while issuing the MYT Order of February 23, 2008, had provisionally approved SVRS Pension for FY 2007-08 to FY 2010-11, subject to the outcome of Actuarial Tribunal Order with the condition that any refund/relief provided on this account to the Petitioner by the Trust will be available for adjustment in future employee expenses. This is yet to be done.



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5.148 Retaining the same SVRS Pension as approved in the MYT Order for FY 2010-11, the Commission has provisionally allowed Rs 6.06 Cr as SVRS Pension Expense for FY 2011-12, subject to true up at the end of the Control Period (FY 2007-08 to FY 2011-12).

Table 179: Approved	SVRS Pensior	n Expenses	(Rs	Cr)
11		-	·	

Particulars	FY 2010-11	FY 2011-12
Pension	6.06	6.06

- 5.149 The capitalisation of employee expenses has been discussed later in this Tariff Order in the section "Capitalisation of Expenses and Interest charges".
- 5.150 The approved employee expenses of the Petitioner for each year of the Control Period are as shown below.

Particulars	FY 2010-11	FY 2011-12
Employee cost	181.11	202.81
New allowances	12.67	202.81
Total Employee Cost	193.78	202.81
Escalation Factor	1.0466	
Less: Capitalization	19.06	13.41
Add: Pension to SVRS	6.06	6.06
Net Employee Expense Approved Now	180.78	195.46

 Table 180: Approved Revised Employee Expenses for the Control Period (Rs Cr)

Allocation into Wheeling and Retail Supply

5.151 The Commission has analyzed the allocation statement of employee expenses into different employee functions submitted by the Petitioner. The Commission has observed that the Petitioner has allocated the employee expenses to VSS/Pension related expenses as well. Since, the Commission has considered VSS related expenses separately; it has not included the same in the employee expenses approved above for the Control Period. Thus, for allocating the net employee expenses into different employee functions, the Commission has recast the allocation statement proposed by the Petitioner in the same proportion as proposed by the Petitioner excluding VSS related expenses. The summary of the same is given below.

Functions	Allocation
Administration	54.03%
System	5.29%
Direct Districts	26.76%
Street Light	0.55%
Billing & Metering	13.29%
Commercial/Enforcement	0.00%

 Table 181: Approved Allocation of Employee Cost into different functions



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Functions	Allocation
Bonus (Ex-gratia)	0.00%
Gratuity	0.00%
Cenpeid	0.09%
Total	100%

- (a) Thereafter, the Commission has allocated the employee cost apportioned to different employee functions between Wheeling Business and Retail Supply Business based on the allocation statement submitted.
- (b) The Commission has also allocated the pension liabilities approved for the Control Period in the proportion of net employee cost allocated to the respective businesses.
- 5.152 The summary of employee cost approved by the Commission for Wheeling and Retail Supply business is shown below.

Particulars	FY 2011-12
Net Employee Cost (Wheeling)	122.20
Pension liability (Wheeling)	3.64
Total – Wheeling	125.84
Net Employee Cost (Retail Supply)	67.20
Pension liability (Retail Supply)	2.42
Total – Retail Supply	69.62

 Table 182: Approved Allocation of Employee Cost (Rs. Cr)

## Administrative and General Expenses

## **Petitioner's Submission**

- 5.153 The Petitioner has proposed A&G Expense of Rs 62.99 Cr for FY 2011-12. The figure proposed has factored in the increase in expenses like bill printing, bill distribution and collection costs (due to increase in number of consumers) etc.
- 5.154 The summary of the proposed A&G cost, allocated to Wheeling and Retail Supply business submitted by the Petitioner is as follows:

Table 183: Proposed Allocation of A&G Expenses (Rs Cr)
--

Particulars	FY 2011-12
Wheeling	17.20
Retail Supply	45.79

5.155 The Petitioner has submitted that in accordance with the MYT regulations, A&G expenses is linked to an inflation-based escalation factor that takes into account the inflation indices of the immediate past five years. While fixing the tariff for FY 2007-08, the Commission had taken inflation figures for FY 2001-02 to FY 2005-06



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because the figures for FY 2006-07 were not available then. The Petitioner has submitted that the provisional computation for FY 2007-08 to FY 2010-11 should be replaced with confirmed figures by correcting the escalation factor as the latest figures of CPI & WPI are now available.

## **Commission's Analysis**

- 5.156 The Commission has, in accordance with the Judgement of Hon'ble ATE in Appeal No. 52/2008 filed by the Petitioner, has re-determined the escalation factor for the Control Period on the basis of actual WPI and CPI for the immediately preceding five years period from FY 2002-03 to FY 2006-07 and not FY 2001-02 to FY 2005-06 as worked out in the MYT Order. The escalation factor, however, has not been revised on a rolling basis as requested by the Petitioner.
- 5.157 For the purpose of calculating A&G Expense for FY 2011-12, the Commission has, determined the A&G Expenses for the Control Period using the same methodology as specified in the MYT Regulations, 2007.

# The Commission has recalculated the A&G expenses for the Control Period (FY 2007-08 – FY 2011-12) as given in

- 5.158 Table 53 by considering the revised approved A&G Expenses of the base year (FY 2006-07) and thereafter escalating the same as per the escalation factor specified in Table 52.
- 5.159 The capitalisation of A&G Expenses has been discussed later in the Order in the section "Capitalisation of Expenses and Interest charges".
- 5.160 The summary of A&G Expenses as approved by the Commission is given below.

Particulars	FY 2011-12
Index(n)/ Index (n-1)	1.0466
Gross A&G Expense approved	37.29
Less: approved capitalization	0.00
Net A&G Expense approved	37.29

## Table 184: A&G Expense for FY 2011-12 (Rs Cr)

## Allocation into Wheeling and Retail Supply

- 5.161 For the purpose of allocating the A&G cost approved above, the Commission has considered the following approach:
  - (a) Since the Petitioner has not submitted the allocation of A&G expenses into Wheeling and Retail Supply business, The Commission has first allocated the A&G expenses approved into different heads, in the same proportion of value under the respective head to the total A&G expenses submitted by the Petitioner in the petition for MYT Order.



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(b) Thereafter, the Commission has allocated the expenses of each component into Wheeling and Retail Supply business based on the allocation statement submitted by the Petitioner in the petition for the MYT Order, as shown below:

Table 185: Statement of Allocation of A&G Cost between	Wheeling & Retail Supply Business
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Functions	Wheeling	<b>Retail Supply</b>
Cash Pick Up	0%	100%
Bill Distribution	0%	100%
Legal	0%	100%
Licence Fee	0%	100%
Brokerage Commission	0%	100%
Freight	0%	100%
Credit Card	0%	100%
Disconnection Exp	0%	100%
Computer Expenses	0%	100%
Rest of the Cost	60%	40%

5.162 The Summary of the A&G cost approved by the Commission for Wheeling and Retail Supply business is shown below.

Particulars	FY 2011-12
Wheeling	14.06
Retail Supply	23.23

#### **Repairs and Maintenance (R&M) Expenses**

## **Petitioner's Submission**

- 5.163 The Petitioner has proposed an R&M Expense of Rs 141.94 Cr for FY 2011-12. The Petitioner has submitted that factors like increase in minimum wages, inflationary impact and increase in the base of fixed assets has been considered while arriving at the projections for FY 2011-12.
- 5.164 The Petitioner has also submitted the allocation of total R&M expenses in different head and the allocation of these respective heads into Wheeling and Retail Supply business. The allocation statement proposed by the Petitioner is given in the table below.

#### Table 187: Allocation of R&M Expenses into different R&M heads

Particulars	Allocation (%)		
Stores & Spares	19.11%		
Street Light	2.45%		
Building	2.61%		
Computer/Off Equip/Other	17.52%		
Meter/Street Light	2.72%		
Automatic Meter Reading Expenses	4.74%		
Meter Reading Expenses	6.81%		



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Particulars	Allocation (%)
Call Centre charges	2.63%
Others	41.42%

Table 188: Allocation of R&M Expenses between Wheeling & Retail Supply Business

Particulars	Wheeling	Retail	
Stores & Spares	100%	0%	
Street Light	0%	100%	
Building	60%	40%	
Computer/Off Equip/Other	60%	40%	
Meter/Street Light	0%	100%	
Automatic Meter Reading Expenses	0%	100%	
Meter Reading Expenses	0%	100%	
Call Centre charges	0%	100%	
Others	60%	40%	

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

Particulars	FY 2011-12
R&M Total	141.94
R&M – Wheeling	82.16
R&M – Retail Supply	59.78

## **Commission's Analysis**

- 5.166 The Commission has, however, determined the R&M expenses for the Control Period using the same methodology as specified in the MYT Regulations, 2007.
- 5.167 As per the MYT Regulation, 2007 for Distribution, 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.

5.168 In the MYT Order of February 23, 2008, the Commission determined the value of 'K' for the Control Period as the average of the individual 'K' for the last 5 years (FY 2002-03 to FY 2006-07). For this, the Commission considered the approved values of R&M Expenses and opening GFA, as contained in Tariff Orders pertaining to the



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period FY 2002-03 to FY 2006-07, to calculate the respective values of 'K' for the previous years, as shown below.

Particulars	FY 2002-03	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07
Opening GFA (Rs Cr)	1210.00	1207.62	1438.43	1679.43	1836.43
R&M Expenses (Rs Cr)	21.93	32.16	53.68	51.64	51.99
'K' (%)	1.81%	2.66%	3.73%	3.07%	2.83%

- 5.169 Based on the analysis shown above, the Commission determined the value of 'K' for the Control Period as 2.81%, which was the average 'K' for preceding 5 years.
- 5.170 Now the Petitioner is proposing R&M expenses by taking K factor of FY 2009-10 as base period and considering increase in the K factor based on increase in inflation during FY 2009-10 subject to true up. However, as the Commission has not approved any additional R&M Expenses for FY 2004-05, FY 2005-06 and FY 2006-07, the basis of revising the K factor does not arise.
- 5.171 The Commission has determined the R&M expenses for FY 2011-12 considering the opening level of GFA as approved by the Commission. The summary of R&M expenses approved by the Commission for the Control Period is as shown below.

Table 191: Approved R&M Expenses for	r FY 2011-12 (Rs Cr)
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Particulars	FY 2011-12
GFA (Opening)	3388.23
K Factor	2.81%
R&M Expenses	95.26

Allocation into Wheeling and Retail Supply

- 5.172 For the purpose of allocating the R&M cost approved above, the Commission has considered the following approach:
  - (a) The Commission has first allocated the total R&M expenses approved for FY 2011-12 under different heads of the R&M expenses based on the allocation statement provided by the Petitioner.
  - (b) Thereby, the Commission has allocated the expenses under each head into Wheeling and Retail Supply business based on the allocation statement submitted by the Petitioner.
- 5.173 The Summary of the R&M expenses approved by the Commission for Wheeling and Retail Supply business is shown below.

#### Table 192: Approved Allocation of R&M Expenses (Rs. Cr)



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Particulars	FY 2011-12
R&M - Wheeling	55.13
R&M - Retail Supply	40.13

## **Efficiency Factor**

- 5.174 In the MYT Order, the Commission had observed that the O&M cost of NDPL is on the higher side as compared to similar urban distribution companies in other states, thus, representing the inefficiencies in the system. In the MYT Order, the Commission has determined the efficiency improvement factor as 2%, 3% and 4% for FY 2008-09, FY 2009-10 and FY 2010-11 respectively.
- 5.175 As the Commission has extended the MYT Regulation upto March 31, 2012, the Commission has followed the efficiency trajectory prescribed by the Commission in the MYT Order and considered efficiency factor of 4% for FY 2011-12 (at the same level as considered for FY 2010-11 in the MYT Order). The Commission expects the Petitioner to improve its performance considering the repetitive nature of O&M works and introduction of new technologies. Further, the Commission is of the view that the Petitioner should try to bring efficiency into the system, thereby, reducing the burden of inefficiencies on to the consumers of Delhi.
- 5.176 The Commission also direct the Petitioner to carry out a proper cost benefit analysis before taking up any new initiatives and submit the same for the approval to the Commission.
- 5.177 The summary of total O&M Expenses approved by the Commission for FY 2011-12 is provided in the table below.

Particulars	FY 2011-12
Employee Expenses	195.46
R&M Expenses	95.26
A&G Expenses	37.29
Total O&M Expenses	328.01
Efficiency Improvement	4%
Net O&M Expenses	314.89
Net O&M Expenses – Wheeling	192.77
Net O&M Expenses – Retail Supply	122.12

 Table 193: Approved O&M Expenses for FY 2011-12 (Rs Cr)

# **Capital Investment**

## Petitioner's Submission

5.178 The Petitioner has submitted that it has arrived at the capital expenditure plan based on the operational challenges, future load projections, Regulatory directions and specific requirements of consumer. It has categorised all capital expenditure under following benefit centers;



- (a) AT&C Loss reduction
- (b) Reliability improvement
- (c) Load growth
- (d) Infrastructure development including administrative buildings
- 5.179 In addition to the above, it has also proposed expenditure to be incurred on Deposit Works which primarily include new 66 and 33 KV Grid substations, Mixed Load / Large Industrial connections, electrification works and shifting of services where full or part of the cost of such works is borne by the land owning agency or the consumer concerned.
- 5.180 The capital expenditure plan proposed by NDPL for FY 2011-12 is given in the table below:

Scheme	FY 2011-12
Metering systems	80
HVDS	20
LT ABC	
Sick cable	
Old	40
New	
11 kV SI	
Old	50
New	
EHV Works	
Internal (Old)	90
Internal (new)	
Deposit EHV	
Automation	5.00
Deposit works	80.00
Information technology	10.00
Civil projects	20.00
Admin support	5.00
Total	400.00

Table 194: Detail-wise Proposed Capital Expenditure for FY 2011-12 (Rs Cr)

5.181 The Petitioner has also proposed to fund the capital expenditure through internal accruals, domestic loans, consumer contribution and depreciation etc.

## **Commission's Analysis**

5.182 The Commission provisionally allows Rs 200.00 Cr as the capital expenditure for FY 2011-12, as against Rs 400.00 Cr proposed by the Petitioner..



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5.183 As per the MYT Regulations, 2007, the Commission would True-Up the capital investment for each year at the end of the Control Period based on the actual capital investment carried out by the Petitioner.

# Assets Capitalisation

## **Petitioner's Submission**

5.184 The Petitioner has submitted the details of the capital works in progress for FY 2011-12. The Petitioner has proposed to capitalize assets worth Rs 269.00 Cr in FY 2011-12, as shown in the table below.

Particular	FY 2011-12
Opening CWIP	91.58
Capitalisation of Investment	269.00
-Investment capitalised out of opening CWIP	69.00
-Investment capitalised out of fresh investment	200.00
Closing CWIP	222.58

<b>Table 195:</b>	Proposed	<b>CWIP</b> for the	Control Period	(Rs Cr)
		• • • • • • • • • • • • • • • •		()

## **Commission's Analysis**

- 5.185 The Commission has analysed the available details to consider provisional capitalization for FY 2011-12 and the same would be subjected to True-Up at the end of the Control Period.
- 5.186 The Commission, here, re-iterates the directions given to the Petitioner in the MYT Order 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 Electrical Inspector/ SLDC/ relevant authority and considered as an element of distribution system in operation.
- 5.187 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 subject to 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.
- 5.188 Based on the above, the Commission has determined the following capitalisation schedule for the investments proposed for FY 2011-12. The Commission would like to clarify that capitalisation approved below is provisional and is subject to True-Up on the basis of actual capital investment made and the schemes Commissioned by the Petitioner.

Table 196: Approved CWIP for FY 2011-12 (Rs Cr)



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Scheme	FY 2011-12
Opening CWIP	159.88
Additions to CWIP	200.00
Capitalisation of Investment	269.00
-Investment capitalised out of opening CWIP till FY 2006-07	0.00
-Investment capitalised out of opening CWIP for investments from FY 2007-08 onwards	159.88
-Investment capitalised out of fresh investment	109.12
Closing CWIP	90.88

## Depreciation

## **Petitioner's Submission**

- 5.189 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, 2007.
- 5.190 The Petitioner, in the ARR petition for FY 2011-12, has revised the opening balance of GFA for FY 2007-08 as Rs. 2,169.28 Cr from Rs 2,280.01 Cr submitted in the petition for the MYT Order. Further, it has also submitted additions to GFA of each year based on the revised capitalisation proposed for FY 2007-08 to FY 2011-12 which is Rs 306.78 Cr, Rs 371.22 Cr, Rs 379.01 Cr, Rs 472.22 Cr and Rs 400.00 Cr respectively.
- 5.191 Accordingly, the Petitioner has proposed Rs 3,698.50 Cr as the opening level of GFA for FY 2011-12 and Rs 400.00 Cr as the capitalisation during the year.
- 5.192 The summary of GFA as proposed by the Petitioner for the Control Period is provided in the table below.

	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
GFA (Opening)	2,169.28	2,476.06	2,847.28	3,226.28	3,698.50
Addition	306.78	371.22	379.01	472.22	400.00
Reduction	-	-	-	-	-
GFA (Closing)	2,476.06	2,847.28	3,226.28	3,698.50	4,098.50

Table 197: Proposed Gross Fixed Assets for FY 2011-12 (Rs Cr)

5.193 For FY 2011-12, the Petitioner has proposed the following depreciation.

Table 108. Proposed Depreciation	(including AAD) for FY 2011-12 (Rs Cr)
Table 198. I Toposed Depreciation	(Including AAD) for FT 2011-12 (KS CI)

Particulars	Rate	FY 2011-12
Land & Land rights	0.00%	0.00
Building and Civil Works		
Office Building	1.80%	3.52
Housing Colony	1.80%	0.65
Temporary Structure	1.80%	0.08



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Particulars	Rate	FY 2011-12
Other Civil Works	1.80%	0.00
Plant & Machinery		
Power Transformers and kiosks	3.60%	16.63
Distribution transformers and kiosks	3.60%	10.71
Other sub Station apparatus	3.60%	2.34
Switchgears, Control gear & Protection	3.60%	26.88
Batteries	18.00%	1.16
Line Cable Networks etc.		
Overhead lines upto 11kV	3.60%	41.10
Undergound cables upto 11kV	2.57%	21.66
Others	6.00%	1.28
Lightening Arrestors (Station Type)	3.60%	0.79
Meters	6.00%	39.26
Vehicles	18.00%	7.36
Furniture & fixtures	6.00%	0.65
Office Equipments	6.00%	6.50
Total Depreciation		180.56

- 5.194 The Petitioner has also submitted the approach followed for allocating each asset of the GFA and its respective depreciation cost into Wheeling and Retail Supply business. As per the Petitioner submission, Network assets upto the consumers' premises are considered as Wheeling Assets and beyond that the assets are considered as Retail Assets. Common Assets such as building, furniture etc. are considered for Wheeling and Retail Supply Business in the ration of 60: 40.
- 5.195 Based on the above approach for allocation of GFA the Petitioner has submitted the break-up of GFA and depreciation (including AAD) into Wheeling and Retail Supply business. The summary of the same is shown in the table below.

Table 199: GFA and Depreciation (incl AAD) proposed for Wheeling and Retail Business (Rs Cr)

Particulars	FY 2011-12
Total GFA (Closing)	4,098.50
GFA – Wheeling	3,339.35
GFA - Retail Supply	759.15
Total Accumulated Depreciation	1,462.86
Depreciation – Wheeling	1197.09
Depreciation – Retail Supply	265.77

## **Commission's Analysis**

- 5.196 The Commission, while allowing for GFA and depreciation for FY 2011-12 has adopted the methodology as per the MYT Regulations, 2007. However, the Commission has revised the opening value of GFA for FY 2007-08, as detailed in Chapter A3 of this Order, as Rs 2043.23 Cr.
- 5.197 In the MYT Order, after determining the opening balance of GFA for FY 2007-08, the Commission has considered asset additions in each year based on the asset capitalisation approved by the Commission for FY 2007-08 to FY 2010-11.



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- 5.198 The Commission has approved the additions to the GFA for FY 2011-12 equal to the approved capitalisation of Rs 269.00 Cr.
- 5.199 The summary of opening and closing GFA for the Control Period (FY 2007-08 to FY 2011-12) is given in the table below.

Particulars	FY2007-08	FY2008-09	FY2009-10	FY2010-11	FY 2011-12
Opening Balance of GFA	2043.23	2563.23	2963.23	3188.23	3388.23
Asset Additions	520.00	400.00	225.00	200.00	269.00
Reduction	0.00	0.00	0.00	0.00	0.00
<b>Closing Balance of GFA</b>	2563.23	2963.23	3188.23	3388.23	3657.23
Average GFA	2303.23	2763.23	3075.73	3288.23	3522.73

Table 200: GFA	Approved by th	e Commission	(Rs Cr)
	mpproved by th	c commission	$(\mathbf{R} \circ \mathbf{C} \mathbf{I})$

5.200 For capitalisation of consumer contribution during FY 2011-12, the Commission has assumed that consumer contribution of any year is getting capitalised in proportion of the investment capitalisation for that year. The Commission has assumed that Rs 159.88 Cr of investment in FY 2010-11 and Rs 109.12 Cr of the investment in FY 2011-12 will be capitalised in FY 2011-12. The consumer contribution capitalised during FY 2011-12 comes to Rs 30.90 Cr from this approach.

Particulars	FY2007-08	FY2008-09	FY2009-10	FY2010-11	FY 2011-12
Opening Balance of consumer contribution and grants	92.68	234.36	323.70	359.78	380.65
Additions	141.68	89.34	36.08	20.87	30.90
Closing Balance of consumer contribution and grants	234.36	323.70	359.78	380.65	411.55
Average consumer contribution and grants	163.52	279.03	341.74	370.22	396.10

Table 201 Consumer contribution and grants for FY 2011-12 (Rs. Cr)

- 5.201 Based on the average of opening and closing value of assets approved, net of Consumer Contribution Grants (average of Opening and Closing balance) during FY 2011-12 and the rates of depreciation, specified in the MYT Regulations, 2007, the Commission has approved the depreciation for the Control Period. Also, while approving the depreciation for the Control Period the Commission has not included the AAD approved for the respective years.
- 5.202 The summary of depreciation approved for FY 2011-12 is given below.

Particulars	Avg. GFA Considered (Rs Cr)*	Rate	Depreciation (Rs Cr)
Land & Land rights		0.00%	0.00
Building and Civil Works			
Office Building	159.40	1.80%	2.87
Housing Colony	23.33	1.80%	0.42
Temporary Structure	3.03	1.80%	0.05
Other Civil Works	26.50	1.80%	0.48

#### Table 202: Approved Depreciation for FY 2011-12 (Rs Cr.)



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Particulars	Avg. GFA Considered (Rs Cr)*	Rate	Depreciation (Rs Cr)
Plant & Machinery			
Power Transformers and kiosks	548.65	3.60%	19.75
Distribution transformers and kiosks	5.69	3.60%	0.20
Other sub Station apparatus	49.02	3.60%	1.76
Switchgears, Control gear & Protection	571.86	3.60%	20.59
Batteries	4.11	18.00%	0.74
Line Cable Networks etc.			
Overhead lines upto 11kV	713.84	3.60%	25.70
Undergound cables upto 11kV	516.39	2.57%	13.27
Others	5.84	6.00%	0.35
Lightening Arrestors (Station Type)	13.17	3.60%	0.47
Communication equipment		6.00%	0.00
Meters	363.49	6.00%	21.81
Vehicles	22.80	18.00%	4.10
Furniture & fixtures	17.50	6.00%	1.05
Office Equipments	81.84	6.00%	4.91
Total Depreciation	3126.63		118.54

\*Average GFA considered is Average GFA available for depreciation (Average GFA – Average Consumer contribution and grants)

## Allocation into Wheeling and Retail Supply

5.203 For the purpose of allocating the GFA and Depreciation approved above, the Commission has considered the allocation statement submitted by the Petitioner. The summary of allocation statement proposed by the Petitioner is shown below.

Table 203: Statement of Allocation of GFA between Wheeling & Retail Supply Business

Particular	Avg. GFA Considered*	Wheeling	Retail Supply
Land & Land rights		100%	0%
Building and Civil Works			
Office Building	159.40	60%	40%
Housing Colony	23.33	60%	40%
Temporary Structure	3.03	60%	40%
Other Civil Works	26.50	100%	0%
Plant & Machinery			
Power Transformers and kiosks	548.65	100%	0%
Distribution transformers and kiosks	5.69	100%	0%
Other sub Station apparatus	49.02	100%	0%
Switchgears, Control gear & Protection	571.86	100%	0%
Batteries	4.11	100%	0%
Line Cable Networks etc.			
Overhead lines upto 11kV	713.84	100%	0%
Undergound cables upto 11kV	516.39	100%	0%
Lightening Arrestors	13.17	100%	0%



Particular	Avg. GFA Considered*	Wheeling	Retail Supply
Communication Equipment		100%	0%
Meters	363.49	0%	100%
Vehicles	22.80	60%	40%
Furniture & Fixtures	17.50	60%	40%
Other Office Equipments	81.84	60%	40%
Any Other Item	5.84	100%	0%

5.204 The summary of the GFA and Depreciation expenses approved by the Commission for Wheeling and Retail Supply business for FY 2011-12 is shown below.

Table 204: Approved Allocation of GFA & Depreciation Expenses for FY 2011-12(Rs. Cr)

Particulars	FY 2011-12
Total GFA (Opening)	3388.23
GFA – Wheeling	2867.11
GFA - Retail Supply	521.12
Total Depreciation	118.54
Depreciation – Wheeling*	91.36
Depreciation – Retail Supply*	27.18

\* Excluding AAD

## Truing up of Depreciation for FY 2011-12

5.205 As per the MYT Regulations, 2007 clause 4.16 (b) (ii), Depreciation shall be trued up at the end of the Control Period.

## Accumulated Depreciation

## **Petitioner's Submission**

5.206 The Petitioner has submitted the schedule of accumulated depreciation (inclusive of AAD) for FY 2011-12, as shown in the table below.

Table 205: Accumulated Depreciation as submitted by the Petitioner for FY 2011-12 (Rs Cr)

Particulars	FY 2011-12
Opening Balance	1,282.30
Depreciation for the year	150.93
AAD for the Year	29.63
Closing Balance	1,462.86

## **Commission's Analysis**

5.207 For calculating the accumulated depreciation for the Control Period, the Commission has considered the accumulated depreciation at the end of FY 2006-07, which includes the depreciation of Rs. 290 Cr, contained in the opening balance sheet of NDPL according to the Transfer Scheme.



5.208 The accumulated depreciation for FY 2011-12 based on depreciation value approved by the Commission for FY 2011-12 (as mentioned in the above section) is as shown below.

Tuble 2000 Approved Accumulated Depreciation (RS 61)		
Scheme	FY 2011-12	
Opening Balance	1,150.94	
Depreciation for the Year	118.54	
Accumulated Depreciation	1,269.48	

#### Table 206: Approved Accumulated Depreciation (Rs Cr)

## Allocation into Wheeling and Retail Supply

- 5.209 For the purpose of allocating the value of Accumulated Depreciation approved above, the Commission has considered the allocation statement for GFA as submitted by the Petitioner (Table 203).
- 5.210 The summary of the GFA and Depreciation expenses approved by the Commission for Wheeling and Retail Supply business for FY 2011-12 is shown below.

Particulars	FY 2011-12
Wheeling	
Opening Balance	948.72
Depreciation for the Year	91.36
Closing Balance	1040.08
Retail Supply	
Opening Balance	202.22
Depreciation for the Year	27.18
Closing Balance	229.40

## **Advance Against Depreciation**

## **Petitioner's Submission**

- 5.211 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. The Petitioner has already included the AAD proposed for each year of the Control Period in the Depreciation expenses claimed for the respective years, as mentioned above.
- 5.212 The summary of AAD proposed by the Petitioner for FY 2011-12 is detailed in the table below.

Particulars	FY 2011-12
$1/10^{\text{th}}$ of the Loan(s)	209.33
Repayment of the Loan(s) as considered for working out Interest on Loan	180.56
Minimum of the Above	180.56

#### Table 208: AAD submitted by NDPL (Rs Cr)



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Particulars	FY 2011-12
Less: Depreciation during the year	150.93
А	29.63
Cumulative Repayment of the Loan(s) as considered for working out Interest on Loan	793.21
Less: Cumulative Depreciation	763.58
В	29.63
AAD = min (A, B) / zero if negative	29.63

## **Commission's Analysis**

- 5.213 The Commission has calculated the advance against depreciation for each year of the Control Period, using the principles specified in the MYT Regulations, 2007 and considering the details of actual cumulative debt repayment and accumulated depreciation claimed by the Petitioner.
- 5.214 While calculating the AAD for the Control Period the Commission has considered the value of accumulated depreciation as net of the depreciation used for capital investment and working capital in the previous years i.e. Rs. 378.97 Cr, as discussed in truing up section (utilisation of depreciation).
- 5.215 The Commission has concluded that no requirement for AAD shall occur during FY 2011-12, as shown below.

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
$1/10^{\text{th}}$ of the Loan(s)	121.41	131.21	144.43	156.97	173.64
Repayment of the Loan(s) as considered for working out Interest on Loan	106.01	111.23	123.92	139.93	156.55
Minimum of the Above	106.01	111.23	123.92	139.93	156.55
Less: Depreciation during the year	79.54	93.15	103.21	110.28	118.54
Α	26.47	18.08	20.71	29.65	38.01
Cumulative Repayment of the Loan(s) as considered for working out Interest on Loan	182.48	293.71	417.63	557.55	714.10
Cumulative Depreciation	844.30	937.45	1040.65	1150.94	1269.48
Depreciation Considered for Capex & WC in Previous years	378.97	378.97	378.97	378.97	378.97
Less: Cumulative Depreciation Considered for AAD	465.33	558.47	661.68	771.96	890.50
В	-282.85	-264.77	-244.05	-214.41	-176.39
AAD = min (A, B) / zero if negative	0.00	0.00	0.00	0.00	0.00

Table 209: AAD approved by Commission (Rs Cr)

Allocation into Wheeling and Retail Supply

5.216 Since the segregation of the loans approved by the Commission is difficult and complex, the Commission is of the view that the entire AAD shall be allocated to the Wheeling business. Thus, entire AAD as approved above by the Commission has been considered towards Wheeling business.



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## Truing up of AAD for the Control Period

5.217 The Commission is of the opinion that AAD determined above is dependent on the loans and depreciation approved by the Commission and since both these parameters are subject to True-Up at the end of the extended Control Period, the Commission would True-Up the AAD as well at the end of the extended Control Period.

# **Return on Capital Employed**

5.218 The Return on Capital Employed (RoCE) for the Petitioner shall be determined as specified in the MYT Regulations, 2007. The RoCE can be determined only after determination of the Regulated Rate Base (RRB) for any particular year, and the Weighted Average Cost of Capital (WACC) for the year.

## **Regulated Rate Base**

## **Petitioner's Submission**

5.219 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, 2007. The detailed working of the proposed RRB for FY 2011-12, as submitted by the Petitioner, is tabulated below:

Particulars	FY 2011-12
RRB-Base Year	
Opening Balance of OCFA	3,698.50
Opening Balance of Working Capital	240.78
Opening Balance of Accumulated Depreciation	1,282.30
Opening Balance of Accumulated Consumer Contribution (in proportion of OCFA to total OCFA+CWIP+Stores)	426.40
<b>RRB</b> -for the year	
Investments in capital expenditure during the year	400.00
Depreciation for the year (including AAD)	180.56
Consumer Contribution, Grants etc. for the year	50.00
Change in working capital	17.96
<b>RRB</b> for the year	2,333.27
Gross Interest	152.79
Average Debt	1,469.98
Op. Bal of Debt	1,434.26
Cl. Balance of Debt	1,505.70
R <sub>d</sub> -Percentage of Cost of Debt	10.39%
Average Equity	966.89
Re- Percentage of Return on Equity	14%
WACC	11.82%
ROCE	275.91

 Table 210: Proposed RRB for FY 2011-12 (Rs Cr)



## **Commission's Analysis**

- 5.220 The Commission has analysed the methodology and assumptions considered by the Petitioner for the determination of RRB for the Control Period.
- 5.221 For the Control Period, the Commission has revised the approved RRB as per the methodology described in Chapter A3 of this Order.
- 5.222 For the Control Period, the return allowed to the Petitioner is as per the methodology specified in the MYT Regulations, 2007. As per Regulation, the return for the year shall be determined by multiplying the weighted average cost of capital employed to the average of "Net Fixed Asset" for each year. Thus, the return allowed each year is determined based on the values of assets capitalised (net of depreciation and consumer contribution) in the respective year and not on the capital investment for that year. The addition in equity/ free reserves and debt during each year of the Control Period is also to the extent of assets capitalised in that year.
- 5.223 The Commission has determined the amount of consumer contribution to be capitalised based on the submission made by the Petitioner and the asset capitalisation approved by the Commission. The summary of the same is given below.

Particulars	FY 2011-12
Investment Approved	200.00
Consumer Contribution	20.00
Asset Capitalisation from new investment FY 2007- 08 onwards	269.00
Asset Capitalisation from old investment prior to FY 2007-08	0.00
Consumer Contribution capitalised	30.90
Consumer Contribution Capitalised During the Year for Investment Prior to FY 2007-08	-
Total Consumer Contribution capitalised during the Year	30.90

Table 211: Capitalised Consumer Contribution (Rs Cr)

5.224 The summary of RRB approved by the Commission for the Control Period is provided in the table below.

	Particulars	FY 2007- 08	FY 2008-09	FY 2009-10	FY 2010- 11	FY 2011-12
Е	RRB (opening)	1238.93	1733.51	1964.31	2070.38	2173.57
F = G-H- I-J	$\Delta AB$	298.78	217.51	85.71	68.85	119.57
G	Investments	520.00	400.00	225.00	200.00	269.00



## NORTH DELHI POWER LIMITED

	Particulars	FY 2007- 08	FY 2008-09	FY 2009-10	FY 2010- 11	FY 2011-12
	capitalized					
Н	Depreciation	79.54	93.15	103.21	110.28	118.54
Ι	AAD	0.00	0.00	0.00	0.00	0.00
J	Consumer Contribution	141.68	89.34	36.08	20.87	30.90
K	Change in WC	195.80	13.29	20.35	34.34	90.45
L = E+F+K	RRB (Closing)	1733.51	1964.31	2070.38	2173.57	2383.59
M = E+F/2+K	RRB(i)	1584.12	1855.56	2027.53	2139.15	2323.80

Allocation into Wheeling and Retail Supply

- 5.225 The Petitioner has not submitted any allocation for RRB or RoCE into Wheeling and Retail Supply business. The Commission, thus, has allocated the RRB(i) approved for the Control Period considering the following:
  - (a) OCFA allocated as per GFA allocation submitted by the Petitioner (Table 203)
  - (b) Depreciation allocated as per GFA allocation submitted by the Petitioner (Table 203)
  - (c) Investment capitalised as per GFA allocation submitted by the Petitioner (Table 203)
  - (d) Consumer Contribution has been considered fully for Wheeling business
  - (e) Allocation of working capital is discussed in the subsequent section
- 5.226 The summary of RRB approved for Wheeling and Retail supply business is given below.

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
RRB(i) – Wheeling	1176.72	1392.73	1514.88	1588.05	1675.28
RRB(i) – Retail Supply	407.40	462.83	512.65	551.09	648.52

## Table 213: Allocation of RRB for the Control Period (Rs Cr)

## **Working Capital Requirement**

## **Petitioner's Submission**

- 5.227 The Petitioner has submitted the details of working capital requirement for each year of the Control Period and has considered the following components for calculating its working capital requirements:
  - (a) Receivables for two months towards tariffs & charges; and
  - (b) Operation and Maintenance expenses for one month.



- (c) Less Power Purchase Expenses for one month
- 5.228 The working capital requirements of the Petitioner for FY 2011-12 based on submissions made by NDPL, are as provided in the table below.

Table 214: Proposed Working Capital for FY 2011-12 (Rs Cr)

Particulars	FY 2011-12
O&M Expenses	542.08
New Initiative/Additional Expense	30.85
1/12 <sup>th</sup> of O&M	45.17
Receivables(actuals/projected collection)	3076.62
Receivables equivalent to 2 months avg. billing	512.77
Power Purchase Expense (net of rebate)	3590.37
1/12 <sup>th</sup> of power purchase expense	299.20
Total Working Capital	258.75
Working Capital-Wheeling	102.44
Working Capital-Retail	156.19

#### **Commission's Analysis**

5.229 Based on the approved O&M Expenses, expected receivables for Wheeling and Retail supply business and the expected Power purchase cost, the Commission approves the working capital requirement for the Control Period as shown in the table below.

Particulars	FY 2011-12
O&M Expenses (adjusted for efficiency factor@ 4%)	309.07
R&M Expenses	95.26
A&G Expenses	37.29
Employee Expenses	189.40
1/12 <sup>th</sup> of Total O&M Expenses	25.76
Receivables	
Annual revenues from Tariffs and Charges	3899.11
Receivables equivalent to 2 months average billing	649.85
Power Purchase expenses	3218.68
Less: 1/12 <sup>th</sup> of power purchase expenses	268.22
Total Working Capital	407.38

Table 215: Approved Working Capital for FY 2011-12 (Rs Cr)

Allocation into Wheeling and Retail Supply



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- 5.230 The Petitioner has not submitted any allocation for working capital requirement for Wheeling and Retail Supply business.
- 5.231 The Commission, thus, has allocated the working capital requirement approved for the Control Period considering the following:
  - (a) Wheeling
    - (i) Receivables for two months towards Wheeling charges
    - (ii) Operation and Maintenance expenses for one month as per allocation
  - (b) Retail Supply
    - (i) Receivables for two months towards Retail Supply tariffs
    - (ii) Operation and Maintenance expenses for one month as per allocation
    - (iii) Less: Power Purchase Expenses for one month
- 5.232 Hence, the working capital for FY 2011-12 has been allocated between Wheeling and Retail Supply business in the following manner:

Table 216: Allocation of Working Capital for the Control Period (Rs Cr)

Particulars	FY 2011-12
Working Capital Requirement – Wheeling	91.36
Working Capital Requirement – Retail Supply	316.02

## Means of Finance

## Petitioner's Submission

5.233 The Petitioner has considered funding of assets capitalised in the normative debt: equity ratio of 70:30 after utilizing the consumer contribution for funding capital investments as per the provisions of MYT Regulations, 2007.

## **Commission's Analysis**

5.234 For the purpose of projecting future funding requirement, the Commission has considered normative debt-equity ratio of 70:30 on the asset capitalised each year after utilizing the consumer contribution. Since the funding for assets capitalised out of closing CWIP for FY 2006-07 has already been provided, to avoid any double counting the Commission has considered the asset capitalised out of new investments from FY 2007-08 onwards for determining the funding requirement. The summary of funding requirement for the Control Period based on the asset capitalisation approved by the Commission is provided in the table below.

## Table 217: Approved Means of Finance for FY 2011-12 (Rs Cr)



Means of finance	FY 2011-12
Consumer Contribution	30.90
Equity/Internal Accruals	71.43
Commercial Borrowing	166.67
Total	269.00

- 5.235 The Commission has considered the same rate of interest for loans as considered in the MYT Order.
- 5.236 The details of new loans approved by the Commission for the FY 2011-12 are mentioned below.

Table 218: Approved	New Loan Details
---------------------	------------------

Year	Туре		Loan Details	
		Amount	Interest Rate	Repayment Details
FY	Capex*	166.67	9.50%	Repayment in 10 yrs (equal annual instalments)
2011-12	WC <sup>#</sup>	90.45	9.50%	Rolling Basis
* 0 1 10				

\* Capital Expenditure <sup>#</sup> Working Capital

- 5.237 The Commission shall True-Up the means of finance for FY 2011-12 as the asset capitalisation is subjected to True-Up. The Commission may True-Up the interest rates considered for new loans to be taken for capital investment and for working capital requirement, if there is a deviation in the PLR of the scheduled commercial banks by more than 1% on either side as mentioned in the MYT Order.
- 5.238 For determining the closing values of equity and free reserves the Commission has considered the closing value for FY 2010-11 approved in the MYT Order and approved addition in free reserves as mentioned in Table 217. The summary of addition in equity and free reserves approved by the Commission for FY 2011-12 is given below.

Particulars	FY 2011-12
Equity	
Opening	368.00
Addition	0.00
Closing	368.00
Free Reserves	
Opening	436.15
Addition	71.43
Closing	507.58
Total	875.58

Table 219: Approved addition in Equity and Free Reserves (Rs Cr)

5.239 Debt approved by the Commission for funding of capital expenditure is shown below:

 Table 220: Approved Debt (Rs. Cr)

Particulars	FY 2011-12
Capex Loan	



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Particulars	FY 2011-12
Opening	1587.60
Addition	166.67
Closing	1754.27
Working Capital Loan	
Opening	263.78
Addition	90.45
Repayment	0.00
Closing	354.23

## **Determination of WACC and RoCE**

#### **Petitioner's Submission**

- 5.240 The Petitioner has determined the weighted average cost of capital (WACC) for FY 2011-12 considering the proposed debt-equity ratio, cost of equity at 14% and weighted average cost of debt. The weighted average cost of debt has been calculated by dividing total interest cost by average debt for FY 2011-12.
- 5.241 The Petitioner has calculated the return on capital employed considering the Regulated Rate Base (RRB) and the WACC for FY 2011-12. The summary of the RoCE calculations, submitted by the Petitioner is provided in the table below.

Particulars	FY 2011-12
Closing RRB for the year	2,333.27
Gross Interest	152.79
Average Debt	1,469.98
Op. Bal of Debt	1,434.26
Cl. Balance of Debt	1,505.70
Rd – Percentage of Cost of Debt	10.39%
Average Equity	966.89
Re- Percentage of Return on Equity	14%
WACC	11.82%
ROCE	275.91

#### **Commission's Analysis**

- 5.242 For determining the WACC, the Commission has followed the methodology specified in the Regulations. Debt to equity ratio has been considered on the average values of debt and equity (including free reserves) approved by the Commission for funding of the asset capitalised. The cost of equity has been considered at 14% and the cost of debt has been determined by dividing total interest cost (on approved loans) by average debt approved for FY 2011-12.
- 5.243 Based on the RRB approved and the WACC calculated using the above methodology the Commission approves the RoCE for the Control Period given in table below.

#### Table 222: Approved RoCE for FY 2011-12 (Rs Cr)

Particulars H

FY 2011-12

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Particulars	FY 2011-12
RRBi	2323.80
Equity (Average)	839.87
Debt (Average)	1979.94
Rate of Return on Equity	14.00%
Rate of Return on Debt	9.31%
WACC	10.71%
RoCE	248.79

Allocation into Wheeling and Retail Supply

- 5.244 The Commission has allocated the RoCE approved above into Wheeling and Retail Supply considering the following:
  - (a) **RRB** allocated to the respective business
  - (b) Debt and Equity in the proportion of allocation of total GFA into Wheeling and Retail supply for each year
- 5.245 The summary of RoCE approved for Wheeling and Retail supply business is given below.

Table 223: Allocation of RoCE for FY 2011-12 (Rs Cr)

Particulars	FY 2011-12
RoCE – Wheeling	179.36
RoCE – Retail Supply	69.43

Truing up of RoCE for the Control Period

5.246 Since all elements of RoCE are subjected to True-Up, the Commission would also True-Up the RoCE for FY 2011-12 approved above at the end of the Control Period.

# **Capitalisation of Expenses & Interest Charges**

## **Petitioner's Submission**

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

Particulars	FY 2011-12
Interest & Finance Charges Capitalised	0.00
Employee Expenses	33.96
A&G Expenses	0.00
Total	33.96

## **Commission's Analysis**

5.248 For capitalizing the employee and A&G expenses for the Control Period, the Commission has considered the capitalisation of Employee and A&G expenses



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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.

5.249 The summary of the employee expenses and interest charges capitalised by the Commission is provided in the table given below.

Particulars	FY 2011-12
Interest & Finance Charges Capitalised	00.00
Employee Expenses Capitalised	13.41
A&G Expenses Capitalised	0.00
Total Capitalisation	13.41

 Table 225: Approved Expense Capitalization (Rs Cr)

Allocation into Wheeling and Retail Supply

5.250 The Commission has allocated expense capitalization into Wheeling and Retail Supply business in the same proportion as the allocation of approved employee expenses into Wheeling and Retail Supply, as shown below:

 Table 226 Allocation of Approved Expense Capitalization (Rs. Cr)

Particulars	FY 2011-12
Expenses Capitalised – Wheeling	8.65
Expenses Capitalised – Retail Supply	4.76

# Tax Expenses

## **Petitioner's Submission**

5.251 The Petitioner has submitted the details about taxes on income tax for FY 2011-12. The summary of taxes submitted by the Petitioner is given in the table below.

Table 227: Proposed Tax Expenses for FY	2011-12 (Rs Cr)
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Particulars	FY 2011-12
Income Tax	36.87

## **Commission's Analysis**

5.252 The Commission is of the opinion that projecting the actual tax liability for the Control Period is difficult and complex. Thus for simplicity, the Commission provisionally approves Rs 15.00 Cr each year towards income tax as approved in the MYT Order for each year of the Control Period. The Commission would, however, True-Up the tax expenses based on the actual tax liability at the end of each year of the Control Period. The Commission has allocated the tax expenses into Wheeling and Retail Supply in the ratio of 20:80, respectively.

## Table 228 Approved Tax Expenses for FY 2011-12



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Particulars	FY 2011-12
Income Tax	15.00

# **Non Tariff Income**

## **Petitioner's Submission**

5.253 The Petitioner has submitted Rs 93.52 Cr as Non Tariff Income (NTI) for FY 2011-12 level. For the purpose of allocating the NTI into Wheeling and Retail Supply Business, the Petitioner has considered Miscellaneous Income in the ratio of 40:60 for the respective business, while the rest of the income has been considered entirely in the retail business.

Table 229: Proposed Nor	n-Tariff Income for	FY 2011-12 (Rs Cr)
· · · · · · · · · · · · · · · · · · ·		

Particulars	FY 2011-12
NTI-Total	93.52
NTI-Wheeling	2.00
NTI-Retail Supply	91.52

## **Commission's Analysis**

5.254 The Commission has approved the NTI at the same level as approved in MYT Order for FY 2010-11 with details shown in the table below.

Table 230: Approved Non-Tariff Income	e for FY 2011-12 (Rs Cr)
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Particulars	FY 2011-12
Interest on contingency investment	1.41
Miscellaneous Receipts	6.19
Commission on collection of ED for MCD	3.79
Miscellaneous Charges	19.24
Non Tariff Income Approved	30.63

Allocation into Wheeling and Retail Supply

5.255 The Commission has considered the allocation statement submitted by the Petitioner to allocate the NTI into Wheeling and Retail Supply business and approved the same. The summary of the same is provided in the table below:

Particulars	FY 2011-12
NTI – Wheeling	12.25
NTI – Retail Supply	18.38

Truing up of NTI for the Control Period

5.256 The Commission shall True-Up the NTI based on the actual values while truing up for FY 2011-12.

# **Other Miscellaneous Expenses/New Initiatives**

Delhi Electricity Regulatory Commission



## Petitioner's Submission

- 5.257 The Petitioner has also proposed Rs 30.85 Cr as additional expense on account of expenditure incurred on some new initiatives, as shown in the table below:
  - (a) CISF Expenses: The Petitioner has submitted that CISF was provided to the DISCOMs during FY 2007-08 to assist in curbing theft of electricity and the Commission also allowed the actual expenses on CISF for FY 2007-08. Hence, the Petitioner has proposed Rs 2.70 Cr in FY 2011-12 as CISF expenses.
  - (b) Repairs of Distribution Transformers: Pursuant to the Order of Hon'ble High Court of Delhi dated 22.12.2009 in writ petition No. 9581/2005, NDPL has been allocated 832 transformers as per provisions of the Shared Facilities Agreement executed at the time of privatization in 2002. These transformers are distribution assets and are not operational at the moment but are required to be repaired. NDPL has estimated that a sum of Rs.16.15 Crore would be required to repair these transformers. These Distribution Transformers shall be put into use in distribution system, it is therefore, requested to consider Rs. 16.15 crore, to be trued up on actual amount, over and above normal R&M expenses as worked out above.
  - (c) Consumer Awareness / Education: NDPL has requested the Commission to allow Rs 2 Cr for for creating general awareness on electricity usage and its rules & regulations, educating people at large about their rights & duties.
  - (d) Energy conservation and Demand side management: NDPL has requested the Commission to allow Rs 5 Cr towards energy conservation and demand side management measures.
  - (e) Additional budget for training: The Petitioner has requested the Commission to allow additional Rs 5 Cr towards training expenses.

Particular	Amount (Rs Cr)
CISF Expenses	2.70
Repair to transformers	16.15
Consumer awareness	2.00
Energy Conservation/DSM	5.00
Training	5.00
Total	30.85

Table 232 Expenses proposed under new initiatives (Rs. Cr)

## **Commission's Analysis**

5.258 The Commission has not allowed any additional expenses to the Petitioner as proposed in line with the methodology adopted in the MYT Order. However, the Commission may True-Up the actual expenses incurred under these heads while truing up for FY 2011-12, subject to the Commission's prudence check and approval based on the submission of the Petitioner duly indicating the cost incurred and benefit derived.



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# **Supply Margin**

#### **Petitioner's Submission**

5.259 The Petitioner has proposed an additional supply margin of Rs 18.52 Cr for FY 2011-12. The detailed submission in given in the table below:

Table 233: Additional return proposed for FY 2011-12 (Rs. Cr)

Additional Return Allowed (Rs. Cr)	FY 2011-12
RRB(i)	2333.27
WACC at 14% RoE	11.82%
RoCE Approved at 14% RoE	275.91
WaCC at 16% ROE	12.62%
Revised RoCE	294.42
Additional Return Allowed	18.52

#### **Commission's Analysis**

- 5.260 As per the MYT Regulations 2007, the supply margin to be allowed for the Retail Supply business shall cover all the expenses of the retail supply business (except power purchase & transmission cost), RoCE allocated to retail supply business and shall also provide an additional return such that the total return from the Wheeling and Retail business shall not exceed 16% of equity.
- 5.261 The Commission has calculated the weighted average cost of capital for FY 2011-12. Thereafter, on the basis of the Regulated Rate Base (RRB) approved for FY 2011-12 (Table 212), the Commission has calculated the difference between RoCE approved with 14% RoE and RoCE approved with 16% RoE, and allowed the same to the Petitioner as supply margin in line with the MYT Regulations.
- 5.262 Hence, the Commission approves additional supply margin to the Petitioner as shown below:

Additional Return Allowed (Rs. Cr)	FY 2011-12
RRB(i)	2323.79
WACC	10.71%
RoCE Approved at 14% ROE	248.79
WaCC at 16% ROE	11.30%
Revised RoCE	262.63
Additional Return Allowed	13.84

Table 234: Additiona	al return approve	d by the Commiss	ion (Rs. Cr)
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5.263 Therefore, the total Supply Margin approved by the Commission is shown below:

Table 235: Approved Supply Margin for FY 2011-12 (Rs. Cr)

Particulars	FY 2011-12
Operation & Maintenance Costs (net of efficiency factor @4%)	122.60



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Particulars	FY 2011-12
- Employee Cost	62.59
- R&M Cost	41.88
- A&G Cost	23.23
Depreciation	27.17
Advance Against Depreciation	0.00
Return on Capital Employed	69.43
Less: Interest capitalized	0.00
Less: Non Tariff Income	18.38
Income Tax Provision	12.00
Other Expenditure	0.00
Additional Return	13.84
Total Supply Margin	226.67

# Aggregate Revenue Requirement

## **Petitioner's Submission**

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

Expenditure	FY 2011-12
Cost of power purchase, including T&D losses	3283.56
Inter-State Transmission charges	114.62
Intra-state Transmission charges	186.39
SLDC fees and charges	5.79
Past Claims of DTL	31.97
O&M Expenses	511.23
Depreciation including AAD	180.56
New Initiative	30.85
Return on Capital Employed	275.91
Income Tax	36.87
Additional Return	18.52
Less	
Other Income (Including income from wheeling charges)	93.52
Annual Revenue Requirement	4582.75

Table 236: Proposed ARR for FY 2011-12 (Rs	Cr)
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5.265 The Petitioner, in the MYT Petition has also submitted the ARR for Wheeling and Retail Supply business. The summary of the same is given below.

Table 237: ARR for Wheeling Business for FY 2011-12 (Rs Cr	:)
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Particulars	FY 2011-12
O&M Expenses	296.99
Depreciation	131.52
Return on Capital Employed	196.56
Income Tax	7.37



Particulars	FY 2011-12
New Initiative	9.67
Less: Other Income (including income from wheeling charges)	2.00
Aggregate Revenue Requirement	640.12

 Table 238: ARR for Retail Supply Business for FY 2011-12 (Rs Cr)

Particulars	FY 2011-12
Cost of power purchase	3622.34
O&M Expenses	214.24
Depreciation	49.04
New Initiative	21.18
Return on Capital Employed	79.35
Income Tax	29.50
Supply Margin	18.52
Less: Other Income (Including income from wheeling charges)	91.52
Aggregate Revenue Requirement	3942.64

## **Commission's Analysis**

5.266 The table given below provides a summary of the Aggregate Revenue Requirement as approved by the Commission for the FY 2011-12. Detailed analysis of each expense head has already been provided in the above sections.

Particulars	FY 2011-12
Cost of power purchase, including T&D losses	2769.37
Inter-State Transmission charges	140.54
Intra-state Transmission charges	308.77
O&M Expenses (Net of expenses capitalized)	314.89
Depreciation	118.58
Any other Expense	0.00
Total Expenditure	3652.10
Return on Capital Employed	262.63
Income Tax	15.00
Less: Non Tariff Income	30.63
Aggregate Revenue Requirement	3899.11

Table 239: Approved ARR for FY 2011-12 (Rs Cr)

5.267 Based on the allocation of different expenses as already discussed above the approved ARR for Wheeling and Retail Supply business is given below.

Table 240: Approved ARR for Wheeling Business for the Control Period (Rs Cr)

Particulars	FY 2011-12
Operation & Maintenance Costs	192.29
Depreciation	91.36



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Particulars	FY 2011-12
Return on Capital Employed	179.36
Less: Non Tariff Income	12.25
Income Tax Provision	3.00
Aggregate Revenue Requirement	453.76

Table 241: Approved ARR for Retail Supply Business for the Control Period (Rs Cr)

Particulars	FY 2011-12
Cost of Power Purchase	2769.37
Inter-State Transmission charges	140.54
Intra-state Transmission charges	308.77
Supply Margin	231.75
Aggregate Revenue Requirement	3445.35

# **Contingency Reserve**

- 5.268 As per the provisions of MYT Regulations, 2007, the regulation provide for maintaining the contingency reserve for maintaining the tariff stability and passing the benefits achieved to the consumers under MYT framework vide. Contingency Reserve.
- 5.269 The Regulation also specifies that "The Licensee shall create a Contingency Reserve at the beginning of the Control Period. The revenue surplus, if any, generated by individual Licensees in and up to FY 2006-07 shall be transferred to their respective Contingency Reserves at the beginning of the Control Period."

"The Licensees shall maintain separate accounts in their books and reflect the balance in the Contingency Reserve Account in the balance sheet. There shall be yearly additions and drawls to/from these Contingency Reserve accounts based on the annual review and performance of the Licensees"

"Funds under Contingency Reserve shall be kept in a separate bank account and shall be effectively invested and managed to earn returns based on market conditions ensuring adequate liquidity. This fund shall not be utilized for speculative purposes. The use of these funds in any other manner shall be only with the prior approval of the Commission."

5.270 The Commission in this Order has approved following contingency reserve till March 31, 2009:

#### Table 242: Approved Contingency Reserve at the end of FY 2009-10 (Rs Cr)

Particular	Rs Cr
Opening Level of Contingency Reserve for FY 2009-10	42.53
Add: Interest during the year on the opening balance	2.98
Closing level of Contingency Reserve for FY 2009-10	45.51

5.271 The Commission has created contingency reserve for the tariff stability. The Commission directs the Petitioner to utilise the contingency reserve for meeting



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revenue gap of FY 2011-12. The Commission will consider the contingency reserve available as on FY 2011-12 towards the aggregate revenue requirement of the Petitioner while truing up for FY 2011-12.



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## A6: TARIFF DESIGN

## **Components of Tariff Design**

- 6.1 The Commission has considered the following components for tariff designing of the DISCOMs.
  - (a) Cross-subsidization in tariff structure
  - (b) Consolidated Sector Revenue Gap/(Surplus)
  - (c) Cost of service

# **Cross-subsidisation in Tariff Structure**

- 6.2 The Electricity Act, 2003 provides for reduction of cross subsidies by moving the category wise tariffs towards cost of supply. The Commission also recognises the need for reduction of cross subsidy. However, it is equally incumbent on the Commission to keep in mind the historical perspective for the need to continue with cross-subsidy for some time.
- 6.3 Regarding Cross subsidy, clause 8.3 of the National Tariff Policy states,

"....Direct subsidy is a better way to support the poorer categories of consumers than the mechanism of cross subsidizing the tariff across the board. Subsidies should be targeted effectively and in transparent manner. As a substitute of cross subsidies, the State Government has the option of raising resources through mechanism of electricity duty and giving that subsidy to only needy consumers. This is a better way of targeting subsidies effectively."

- 6.4 In line with the above provision of the National Tariff Policy, Clause 9.1 of the MYT Regulations states that any consumer desirous of getting subsidized tariff shall approach the State Government and if the request for subsidy is found justified, the State Government may give subsidy to that class of consumers so that these consumers get electricity at concessional tariff.
- 6.5 At present, there are a number of consumer classes such as some slabs of domestic consumers, Agriculture & Mushroom Cultivation, Government Schools/Colleges, Hospitals, etc. which are being cross subsidized by other consumers. Several stakeholders have raised serious concern over cross subsidization of some categories and argued that after privatization, electricity distribution is purely commercial operation and there is no justification for making some consumers pays for others. If any class of consumers is to be given concessional tariff on socio-economic ground, the State government shall bear the cost on this count as supporting weaker sections of society is the responsibility of the government.
- 6.6 The Commission is of the view that in an ideal case electricity tariff for all categories of consumers should be fixed on cost to serve basis. In accordance with the Act and the policies prescribed from time to time, the Commission has made an attempt in this



Tariff Order to reduce the prevailing cross-subsidy as detailed in the subsequent sections.

# **Consolidated Revenue (Gap)/ Surplus for the Sector**

#### Revenue (Gap)/ Surplus till FY 2009-10

6.7 The Commission has approved the revenue (gap)/surplus for the Petitioner for the past period, FY 2007-08 to FY 2009-10 (as discussed in details in Chapter A3 and A4 of this Order) as summarised in the table below:

#### Table 243: Net Revenue (Gap)/ Surplus of NDPL till FY 2009-10 (Rs. Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10
Opening level of Gap	(156.34)	(374.27)	(360.38)
Revenue (Gap)/Surplus approved in the True-Up Order for FY 2007-08	(183.79)		
Revenue Requirement for the year		2295.14	3259.42
Revenue at existing tariffs		2344.58	2567.42
Surplus/ (Gap) for the year		49.44	(692.00)
Additional Surplus/ (Gap) for the year on account of Hon'ble ATE Orders	(10.93)		
Closing level of (Gap)/Surplus	(351.06)	(324.83)	(1052.38)
Carrying Cost for the year @	9.15%	10.17%	8.53%
Carrying Cost	(23.21)	(35.55)	(60.25)
Closing Balance of Net (Gap)/ Surplus	(374.27)	(360.38)	(1112.64)

6.8 The summary of revenue (gap)/ surplus approved for BRPL and BYPL for till FY 2009-10 is shown below:

#### Table 244: Revenue (Gap)/ Surplus of BRPL for till FY 2009-10 (Rs. Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10
Opening level of Gap	(404.47)	(586.94)	(611.50)
Revenue (Gap)/Surplus approved in the True-Up Order for FY 2007-08	(128.95)		
Revenue Requirement for the year		3069.39	4351.69
Revenue at existing tariffs		3109.13	3408.33
Surplus/ (Gap) for the year		39.74	(943.36)
Additional Surplus/ (Gap) for the year on account of Hon'ble ATE Orders	4.78		
Closing level of (Gap)/Surplus	(538.20)	(547.20)	(1555.10)
Carrying Cost for the year @	10.34%	11.34%	11.49%
Carrying Cost	(48.74)	(64.31)	(124.47)
Closing Balance of Net (Gap)/ Surplus	(586.94)	(611.50)	(1679.57)



Particulars	FY 2007-08	FY 2008-09	FY 2009-10
Opening level of Gap	(158.50)	(113.27)	25.93
Revenue (Gap)/Surplus approved in the True-Up Order for FY 2007-08	53.72		
Revenue Requirement for the year		1562.72	2348.38
Revenue at existing tariffs		1706.62	1841.57
Surplus/ (Gap) for the year		143.90	(506.81)
Additional Surplus/ (Gap) for the year on account of Hon'ble ATE Orders	5.56		
Closing level of (Gap)/Surplus	(99.22)	30.63	(480.88)
Carrying Cost for the year @	10.90%	11.38%	11.33%
Carrying Cost	(14.05)	(4.70)	(25.77)
Closing Balance of Net (Gap)/ Surplus	(113.27)	25.93	(506.65)

#### Table 245: Revenue (Gap)/ Surplus of BYPL for till FY 2009-10 (Rs. Cr)

Table 246: Revenue (Gap)/ Surplus for all DISCOMs at the end of FY 2009-10 (Rs. Cr)

Particulars	Up to FY 2009-10
BRPL	(1679.57)
BYPL	(506.65)
NDPL	(1112.64)
Total	(3298.86)

- 6.1 It can be seen from the above that the accumulated Revenue Gap till FY 2009-10 for all the DISCOMs are Rs 3298.86 Cr. The Commission in its Tariff Order for FY 2009-10 had approved revenue gap till FY 2007-08 as Rs 1035.68 Cr. However, it had also projected a revenue surplus of Rs 565.95 Cr and Rs 939.1 Cr for FY 2008-09 and FY 2009-10 respectively, due to which there was no revision of tariff approved by the Commission. The Commission in this Order has revised the revenue gap till FY 2007-08 to Rs 1074.48 Cr on account of Orders of the Hon'ble ATE on the appeal filed by the DISCOMs and Order of the Commission on review petition filed by DISCOMs. The Commission in this Order has approved revenue surplus of Rs 233.08 Cr for FY 2008-09 after truing up for FY 2008-09 which is lower than revenue surplus of Rs 565.95 Cr estimated by the Commission in its MYT Order. The Commission in this Order has also approved revenue gap of Rs 2142.17 Cr for FY 2009-10 after truing up for FY 2009-10 against a revenue surplus of Rs 939.1 Cr estimated by the Commission in its Tariff Order for FY 2009-10 dated May 28, 2009.
- 6.2 The Commission in its Order dated May 28, 2009 had projected higher energy availability from the new stations vis-à-vis actual energy received by the Delhi DISCOMs from these new stations. The Commission also assumed rate of sale of surplus power as Rs 5.50 per unit based upon the actual rates in FY 2007-08 and FY 2008-09, which was contributing towards surplus. However, as the actual energy available from the new stations was much lower than the Commission's estimation, the DISCOMs faced a deficit situation rather than a surplus scenario as estimated by the Commission. The deficit energy was procured by the DISCOMs at a very high rate due to lower availability of energy in midst of a very harsh summer. All these



have resulted in huge revenue gap in FY 2009-10 vis-à-vis revenue surplus projected by the Commission.

# **Revenue (Gap)/ Surplus for FY 2011-12 at Existing Tariffs**

6.3 The Summary of net revenue (gap)/ surplus approved for NDPL at existing tariffs for the current year, FY 2011-12 is shown below:

Table 247: Revenue (Gap)/ Surplus of NDPL at Existing Tariffs for FY 2011-12 (Rs. Cr)

Particulars	FY 2011-12
Revenue Requirement for the year	3899.11
Revenue at existing tariffs	3098.90
Surplus/ (Gap) for the year	(800.21)

6.4 The Summary of net revenue (gap)/ surplus for BRPL and BYPL at existing tariffs for the current year, FY 2011-12 is shown below:

Table 248: Revenue (Gap)/ Surplus of BRPL at Existing Tariffs for FY 2011-12 (Rs. Cr)

Particulars	FY 2011-12
Revenue Requirement for the year	5397.22
Revenue at existing tariffs	4259.49
Surplus/ (Gap) for the year	(1137.73)

#### Table 249: Revenue (Gap)/ Surplus of BYPL at Existing Tariffs for FY 2011-12 (Rs. Cr)

Particulars	FY 2011-12
Revenue Requirement for the year	3136.10
Revenue at existing tariffs	2304.69
Surplus/ (Gap) for the year	(831.41)

Table 250 Revenue (Gap)/ Surplus for all DISCOMs for FY 2011-12 (Rs. Cr)

Particulars	FY 2011-12
BRPL	(1137.73)
BYPL	(831.41)
NDPL	(800.21)
Total	(2769.35)

# **Treatment of Revenue (Gap)/Surplus**

#### **Petitioner's Submission**

6.5 The Petitioner has proposed aggregate revenue requirement (ARR) of Rs 4582.75 Cr for FY 2011-12 (without past revenue gaps and carrying cost) against a projected revenue collection of Rs 3061.24 Cr at existing tariff. Thus, the revenue deficit at existing tariff proposed by the Petitioner for FY 2011-12 is Rs 1521.51 Cr.



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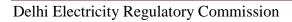
6.6 The Petitioner has proposed a tariff hike in order to recover the entire current year revenue gap (Rs 1521.51 Cr) for FY 2011-12.

### **Commission's Analysis**

- 6.7 The revenue deficit for FY 2011-12 of the three DISCOMs for FY 2011-12 is Rs 2769.35 Cr. While, the accumulated revenue deficit till FY 2009-10 (along with carrying cost) is Rs 3298.86 Cr. Keeping in view the significant deficit with all three DISCOMs and in an attempt to make tariffs cost reflective, the Commission has decided to revise the tariff for all consumer categories in order to enable the DISCOMs to atleast recover a part of the approved revenue requirement for FY 2011-12.
- 6.8 During the process of true up for FY 2008-09 and FY 2009-10, the Commission solicited stakeholder's comments and suggestion on the issue of whether to merge the sub-categories of Non-Domestic Consumer, namely Non-Domestic Low Tension Consumers (NDLT-I & II) and Mixed Load High Tension (MLHT) consumers.
- 6.9 Some of the stakeholders submitted that these categories should be merged into one. The Commission, therefore, has decided to merge the two sub-categories into one on grounds of similarity in the nature of the end use of the energy supplied. However, the sub categories will further be categorized at different voltage levels, i.e. at LT and HT levels, as shown below:

	Old Tariff Structure: Non-Domestic Category
i.	Non- Domestic Low Tension (NDLT)-I
	Upto 10 kW
	Between 10kW to 100 kW
ii.	Non-Domestic Light Power on 11 KV Single Delivery Point for Commercial Complexes (NDLT) -II
iii.	Mixed Load High Tension (MLHT) for load greater than 100 kW
	Supply on 11KV and above
	Supply on LT (400 Volts)

	Revised Tariff Structure: Non-Domestic Category		
i.	Non- Domestic Low Tension (NDLT)		
	Upto 10 kW		
	Between 10kW to 100 kW		
	More than 100 kW but less than 200 kW		
ii	Non – Domestic High Tension (NDHT)		
	For supply at 11 kV and above		





# **Revenue (Gap)/Surplus at Approved Tariffs**

6.10 The summary of revenue billed at existing tariffs for NDPL for FY 2011-12 is shown below:

Summary of Revenue	Fixed Charge	Energy Charge	Total Revenue Billed
Domestic	52.31	965.37	1017.68
Non-Domestic	78.40	646.00	724.40
Industrial	88.73	962.46	1051.19
Public Lighting	0.00	44.83	44.83
Irrigation & Agriculture	0.34	2.50	2.84
Railway Traction	3.88	22.46	26.34
DMRC	2.72	57.51	60.23
Others (DIAL,DJB,Temporary, Misuse, Enforcement etc.)	10.34	176.62	186.95
Total	236.72	2,877.74	3,114.47
Total Revenue Collected	3098.90		

#### Table 251: Revenue at existing tariffs (Rs. Cr)

- 6.11 Taking the collection efficiency at 99.50% as approved for FY 2011-12, the revenue realized in FY 2011-12 projected by the Commission at existing tariff is Rs 3098.90 Cr.
- 6.12 After revision of the tariff, the summary of revenue at the tariff approved now is shown below:

Summary of Revenue	Fixed Charge	Energy Charge	Total Revenue Billed
Domestic	59.78	1072.41	1132.19
Non-Domestic	90.38	721.83	812.21
Industrial	106.81	1109.48	1216.29
Public Lighting	0.00	51.08	51.08
Irrigation & Agriculture	0.39	2.73	3.12
Railway Traction	3.88	25.88	29.76
DMRC	3.25	66.18	69.43
Others	10.34	194.54	204.87
Total	256.49	3238.42	3519.32
Total Revenue Collected	3501.72		

#### Table 252: Revenue at revised tariffs (Rs. Cr)

- 6.13 Taking the collection efficiency at 99.50% as approved for each year of the MYT Control Period, the revenue realized in FY 2011-12 projected by the Commission is Rs. 3501.72 Cr.
- 6.14 After revision of the tariff, the net revenue (gap)/ surplus for NDPL along with adjustment at approved tariffs is shown below:



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Table 253: Net Revenue (Gap)/ Surplus of NDPL at Revised Tariffs for FY 2011-12 (Rs. Cr)

Particulars	FY 2011-12
Revenue Requirement for the year	3899.11
Revenue available at revised tariffs	3501.72
(Gap)/ Surplus for the year	(397.39)

6.15 The Commission observes that the revenue gap for the Petitioner till FY 2009-10 is Rs 1112.64 Cr, while revenue gap for FY 2011-12 at existing tariff is Rs 800.21 Cr. The tariff increase approved by the Commission in this Order will enable the Petitioner to generate additional revenue of Rs 402.82 Cr in the remaining period of the year, leaving revenue gap for FY 2011-12 on standalone basis at Rs 397.39 Cr. The Commission shall endeavour to cover the revenue gap approved till FY 2009-10 and un-recovered revenue gap for FY 2011-12 in the course of forthcoming MYT Period.

# **Cost of Service Model**

- 6.16 While determining the revenue requirement, various sectors of services, viz. generation, transmission and the distribution cost contributes to the total cost of service. The relative burden of constituent consumer categories is assessed and on the basis of the cost imposed on the system, it is decided as to how much share is due to which category of consumers. Although, it shall be equitable to have the embedded cost in designing the tariff for different consumer categories, it calls for a detailed database of allocated costs. Such allocations in the determination of embedded cost are done on the basis of following factors:
  - (a) Voltage of supply;
  - (b) Power factor;
  - (c) Load factor;
  - (d) Time of use of electricity;
  - (e) Quantity of electricity consumed,
  - (f) AT&C Loss etc.
- 6.17 As the detailed information regarding all the above factors except AT&C loss is not available, it would be difficult to assess the cost of service with reference to all the above factors except AT&C loss.
- 6.18 In the MYT Order, Commission had computed the voltage wise cost of supply for the first two years of the Control Period i.e. FY 2007-08 and FY 2008-09. Based on the same approach, the Commission has carried out a study for calculating the voltage wise cost of supply (CoS) for all the three DISCOMs for FY 2011-12. The approach adopted by the Commission for determining the CoS for different voltage levels has been described in the following paragraphs.



6.19 The approved ARR of the Wheeling and Retail Supply business (excluding supply margin) is allocated to different voltage levels and the same has been considered along with the energy sales to the respective voltage level to arrive at the Paisa per unit Wheeling charge and Retail Supply Charge for that voltage level (detailed methodology discussed ahead).

### Allocation of Wheeling ARR

6.20 The Commission has considered the gross energy sales (MU) approved for DISCOM for the year and has allocated the same to different voltage levels in the proportion of energy sales (MU) to these voltages to total sales in that year as submitted by the respective DISCOM. Both BRPL and BYPL has submitted that there is no energy sales above 66 kV level in their distribution area and therefore, no energy sales has been considered above 66 kV level while computing the CoS.

Particulars	FY 2011-12		
	BRPL	BYPL	NDPL
Sales above 66 kV level			190.00
Sales at 33/66 kV level	224.27	130.00	61.51
Sales at 11 kV level	1,445.64	456.99	872.37
Sales at LT level	7,714.14	4,632.89	5,809.07
Total	9,384.05	5,219.88	6,932.95

Table 254: Approved Energy Sales (MU)

6.21 The Commission has, thereafter, grossed up the energy sales (MU) at the specific voltage level with the respective distribution losses (%) at that level to arrive at the Energy Input (MU) for that level. Since the accurate baseline data for the voltage wise distribution losses is not available, the Commission has considered the estimates of the same after considering the submissions made by the DISCOMs, and approved distribution losses. The summary of the voltage wise distribution losses considered by the Commission is as follows.

Particulars	FY 2011-12		
	BRPL	BYPL	NDPL
Loss above 66 kV level	0.00%	0.00%	0.00%
Loss at 33/66 kV level	1.40%	0.90%	1.45%
Loss at 11 kV level	2.47%	1.93%	4.95%
Loss at LT level	16.83%	19.24%	14.05%

#### Table 255: Distribution Loss (%)

6.22 The Commission would like to re-iterate that the voltage wise distribution losses considered above are estimates and may not reflect the actual picture. The Commission, in this regard directs all the three DISCOMs (BRPL, BYPL and NDPL) to immediately carry out energy audit of the sales at HT level (33 kV and 11kV) and submit the report to the Commission by 30 June, 2010, so that the actual data of distribution losses at different voltage levels could be used to calculate the cost of



supply in the next Tariff Order. The summary of Energy Input (MU) for the respective voltage levels are shown below:

Particulars		FY 2011-12	
	BRPL	BYPL	NDPL
Input for 66 kV level	0.00	0.00	190.00
Input for 33/66 kV level	227.45	131.18	62.42
Input for 11 kV level	1,482.25	465.98	917.81
Input for LT level	9,275.16	5,736.72	6,758.84
Total	10,984.86	6,333.88	7,929.06

- 6.23 Next, the Commission has allocated the approved GFA of the DISCOMs to different voltage levels. This is in line with the approach followed by the Commission in the MYT Order. Accordingly, the Commission had directed the DISCOMs to submit their estimates of allocation of GFA to different voltage levels. BYPL has submitted the ARR for wheeling and retail business across different voltage level based on the cost audit report. Further, the Petitioner has segregated components of Wheeling and Retail ARR across different voltage levels. They have also segregated the depreciation across different voltage levels based on the GFA at each voltage level. Therefore, the Commission has considered the submission of the Petitioner and is of the view that depreciation allocated by Petitioner in their cost of supply submission is as per the GFA at different voltage level.
- 6.24 Based on the voltage wise assets allocation, the Commission has allocated the Wheeling ARR to the assets at respective voltage levels, which is summarised below:

Particulars	FY 2011-12		
	BRPL	BYPL	NDPL
Asset at 66 kV level	0.00	0.00	0.00
Asset at 33/66 kV level	33.66	22.38	94.65
Asset at 11 kV level	119.26	61.84	241.85
Asset at LT level	470.77	302.74	117.26
Total	623.69	386.97	453.76

Table 257: Wheeling Cost allocation asset wise (Rs Cr)

6.25 The Wheeling cost apportioned above to a particular assets category is thereby reallocated to different voltage levels in proportion of their contribution to the energy input at that level as shown below:

Particulars	FY 2011-12		
	BRPL	BYPL	NDPL
Asset at 66 kV level	0.00	0.00	0.00
Asset at 33/66 kV level	0.70	0.46	0.76



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Particulars	FY 2011-12		
	BRPL	BYPL	NDPL
Asset at 11 kV level	21.97	6.29	40.14
Asset at LT level	602.02	380.21	412.86
Total	624	387	453.76

6.26 Based on the energy sales at the respective voltage level the Commission has determined the Wheeling Charge per unit for different voltages for FY 2011-12.

Particulars	FY 2011-12		
	BRPL	BYPL	NDPL
Asset at 66 kV level	0.00	0.00	0.00
Asset at 33/66 kV level	3.11	3.57	12.41
Asset at 11 kV level	14.51	13.77	46.01
Asset at LT level	78.04	82.07	71.07
Total	66.46	74.13	65.45

Table 259: Wheeling Charge (Paisa per unit)

#### Allocation of Supply Margin and balance of Retail Supply ARR

6.27 The Commission has allocated the Retail Supply ARR (excluding Supply Margin) and the Supply Margin approved in the ratio of energy input determined above for different voltage levels. The Commission has thereafter, determined the Retail Supply charge and Supply Margin charge for a particular voltage level by considering energy sales at that voltage level. The summary of the same is shown below.

Particulars	FY 2011-12		
	BRPL	BYPL	NDPL
Asset at 66 kV level	0.00	0.00	405.93
Asset at 33/66 kV level	417.98	417.26	411.91
Asset at 11 kV level	422.57	421.65	427.07
Asset at LT level	495.53	512.03	472.30
Total	482.43	501.76	464.26

 Table 260: Retail Supply Charge (Paisa per unit)

Table 261: Supply Margin	Charge (Paisa per unit)
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Particulars	FY 2011-12		
	BRPL	BYPL	NDPL
Asset at 66 kV level	0.00	0.00	28.59
Asset at 33/66 kV level	22.74	20.71	29.01
Asset at 11 kV level	22.99	20.93	30.08
Asset at LT level	26.96	25.42	33.26
Total	26.25	24.91	32.69



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6.28 The cost of supply determined by the Commission for the different voltage levels is shown below.

Particulars	FY 2011-12			
	Wheeling	RST	$\mathbf{SM}$	Total
Above 66 kV level	0.00	405.93	28.59	434.52
At 33/66 kV level	12.41	411.91	29.01	453.33
At 11 kV level	46.01	427.07	30.08	503.16
At LT level	71.07	472.30	33.26	576.64
Average	65.45	464.26	32.69	562.40

Table 262: Cost of Supply for NDPL (Paisa per Unit)

#### Table 263: Cost of Supply for BRPL (Paisa per Unit)

Particulars	FY 2011-12			
	Wheeling	RST	SM	Total
Above 66 kV level	0.00	0.00	0.00	0.00
At 33/66 kV level	3.11	417.98	22.74	443.83
At 11 kV level	14.51	422.57	22.99	460.07
At LT level	78.04	495.53	26.96	600.53
Average	66.46	482.43	26.25	575.15

#### Table 264: Cost of Supply for BYPL (Paisa per Unit)

Particulars	FY 2011-12			
	Wheeling	RST	$\mathbf{SM}$	Total
Above 66 kV level	0.00	0.00	0.00	0.00
At 33/66 kV level	3.57	417.26	20.71	441.54
At 11 kV level	13.77	421.65	20.93	456.35
At LT level	82.07	512.03	25.42	619.52
Average	74.13	501.76	24.91	600.80

# **Tariff Structure**

### **Domestic Tariff**

6.29 Domestic tariff is applicable for power consumption of residential consumers, hostels of recognized/aided educational institutions and staircase lighting in residential flats, compound lighting, lifts and water pumps or drinking water supply and fire fighting equipment, etc. in Cooperative Group Housing Societies (CGHS), bonafide domestic use in farm houses, etc.



- 6.30 All the Cattle/ Dairy Farms and Dhobi Ghat across Delhi with a total consumption of not more than 200 units in a month and connected load of up to 2 kW shall be charged domestic tariff. However, in case the consumption in a month exceeds 200 units, the total consumption including the first 200 units shall be charged non-domestic rates as applicable to the consumers falling under the Non Domestic category.
- 6.31 The Commission in its Tariff Order dated June 26, 2003 introduced two part tariff for domestic consumers, i.e., fixed charges and energy charges and abolished minimum charges and meter rent. The fixed charge in two-part tariff represents the fixed component of charges, which is independent of consumption level and depends on the fixed cost incurred by the Utility in supplying electricity.
- 6.32 The Commission has considered the views expressed by the stakeholders and after considering various options, the Commission proposes to continue with the existing methodology of levying fixed charges on slab system, based on the sanctioned load till sanctioned load of 5 kW and for sanctioned load abov 5 kW, the fixed charges shall be applicable in Rs/kW terms.

# JJ Clusters

6.33 In this Order, the Commission has abolished this sub-category on the grounds that DISCOMs were directed to install meters for all un-metered consumer in line with the National Tariff Policy which stipulates 100% metering of the consumers. Accordingly, the DISCOMs shall bill them as per the applicable tariff for domestic category.

### Domestic single delivery point at 11 kV for CGHS

- 6.34 In respect of tariff for Cooperative Group Housing Societies (CGHS) complexes, the Commission had in tariff schedule of its earlier Orders specified that billing for energy charges would be slab-wise, for the first 44.4% of consumption, next 44.4% of consumption and next 11.2% of consumption as per slabs in the domestic category. The Commission has decided to follow same principle in this Tariff Order as well.
- 6.35 The Commission directs that all CGHS availing electricity on single delivery point at 11kV and having common generator back-up, to install dual meters in order to meter the supply from the DISCOM and generator separately within six months of issuance of this Tariff Order. The Commission also directs all the CGHS to bill its constituent consumers separately for the supply received from the DISCOM and supply from the generators.

### Domestic connections in un-electrified left out pockets and villages

6.36 The tariff for domestic connections in un-electrified left out pockets and villages were earlier applicable on the basis of plot size. The lump sum monthly rates payable for this sub-category had been approved in the previous Tariff Order on that basis.



6.37 In this Order, the Commission has decided to abolish this category as it has considered that electricity connection in all such pockets and villages have been already metered and new connection shall be released with meter only. Hence, any consumption by these consumers are now accounted for in the different slabs of the domestic category.

#### **Non-Domestic Tariff**

6.38 Non-domestic category of consumers comprises two sub-categories, viz., Supply on Low Tension and Supply on High Tension (11 kV and above).

#### Non-Domestic Low Tension (NDLT)

- 6.39 This category covers LT non-domestic consumers having contract demand or sanctioned load (whichever is applicable) upto 200kW / 215kVA.
- 6.40 For the consumers with sanctioned load up to 10 kW in this category, the Commission had specified the kWh based tariff only. The Commission has decided to continue with the existing practice.
- 6.41 For Non-domestic consumers having contract demand or sanctioned load more than 10 kW (11 kVA) and up to 100 kW (108 kVA), the Commission has specified kVAh based energy charges.
- 6.42 Non Domestic consumers having contract demand or sanctioned load (whichever is lower) more than 100 kW/108 kVA and up to 200 kW/215 kVA and availing supply on LT will also be charged kVAh tariff which will be higher than tariff for non domestic consumers having contract demand or sanctioned load more than 10 kW and up to 100 kW/(108 kVA). This has been done in view of the fact that the lower the voltage of supply, higher will be the system losses and hence the consumers with connected load more than 100 kW (108 kVA) at LT voltage(415 V) have to be discouraged.
- 6.43 The Commission believes that with gradual movement towards voltage linked tariff, irrespective of load of the consumer, the tariff for consumption at higher voltages will be lower than that for lower voltages, which will discourage consumers to opt for LT connections particularly for loads higher than 100 kW.
- 6.44 For existing consumers having sanctioned load/contract demand, whichever is applicable, in kW, the actual power factor of the consumer in the relevant billing cycle shall be considered for converting kW to kVA for computing the fixed charges. For new consumers, the sanctioned load/contract demand shall be in terms of kVA only

### Non-Domestic High Tension (NDHT)

### Merger of erstwhile NDLT-II and MLHT categories

6.45 Non-domestic consumers with contract demand or sanctioned load more than 200 kW/ 215 kVA shall avail supply on 11 kV.



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- 6.46 Non domestic consumers availing supply on 33 kV/66 kV or 220 kV will be entitled for rebate of 2.5% and 4% respectively on the applicable energy charges on 11 kV tariff.
- 6.47 For existing consumers having sanctioned load/contract demand, whichever is applicable, in kW, the actual power factor of the consumer in the relevant billing cycle shall be considered for converting kW to kVA for computing the fixed charges. For new consumers, the sanctioned load/contract demand shall be in terms of kVA only.

### **Industrial Tariff**

6.48 Industrial category of consumers consists of two sub-categories, viz., Small Industrial Power (SIP) and Large Industrial Power (LIP).

### **Small Industrial Power (SIP)**

- 6.49 This category covers industrial consumers having contract demand or sanctioned load, whichever is applicable, upto 200kW / 215kVA.
- 6.50 For the consumers with sanctioned load up to 10 kW in this category, the Commission had specified the kWh based tariff only. The Commission has decided to continue with the existing practice.
- 6.51 For Industrial consumers having contract demand or sanctioned load more than 10 kW/11 kVA and up to 100 kW/108 kVA, the Commission has specified the kVAh based tariff.
- 6.52 Industrial consumers having contract demand or sanctioned load more than 100 kW/108 kVA and up to 200 kW/215 kVA and availing supply on LT will also be charged kVAh tariff which will be higher than the tariff for Industrial consumers having contract demand or sanctioned load more than 11 kVA and up to 108 kVA. This has been done in view of the fact that lower the voltage of supply, higher the system losses and hence consumers with connected load more than 108 kVA at LT voltage (415 V) have to be discouraged.
- 6.53 For existing consumers of 10 kW and above having sanctioned load/contract demand, whichever is applicable, in kW, the actual power factor of the consumer in the relevant billing cycle shall be considered for converting kW to kVA for computing the fixed charges. For new consumers, the sanctioned load/contract demand shall be in terms of kVA only.

# Large Industrial Power (LIP)

6.54 Industrial consumers with contract demand or sanctioned load more than 215 kVA shall avail supply on 11 kV.



- 6.55 The Commission believes that with gradual movement towards voltage linked tariff, irrespective of load of the consumer, the tariff for consumption at higher voltages will be lower than that for lower voltages, which will discourage consumers to opt for LT connections particularly for loads higher than 100 kW.
- 6.56 For supply at 33/66 kV, consumers will get a rebate of 2.5% on the energy charges applicable for supply at 11 kV and a rebate of 4% for supply at 220 kV.
- 6.57 For existing consumers having sanctioned load/contract demand, whichever is applicable, in kW, the actual power factor of the consumer in the relevant billing cycle shall be considered for converting kW to kVA for computing the fixed charges. For new consumers, the sanctioned load/contract demand shall be in terms of kVA only.

### Agriculture

6.58 Agriculture connections are available for tube wells for irrigation, threshers and kutty cutting in conjunction with pumping load for irrigation purpose for loads up to 10 kW and lighting load for bonafide use in 'Kothra'.

### **Mushroom Cultivation**

6.59 This category is applicable to the consumers who are engaged in mushroom cultivation/processing.

# Public Lighting

- 6.60 Tariff for this category is applicable to all street light consumers including MCD, DDA, PWD/CPWD, CGHS, Slums, DSIIDC and certain civilian pockets of MES. The share of MCD, however is dominating as most of the street lights in the city are owned by the MCD.
- 6.61 As regard to the maintenance charges for street lighting, the Commission would like to clarify that the maintenance charges and other conditions of maintenance of street lights as approved in the Commission's Order dated September 22, 2009 will continue till such time it is amended.

# **Railway Traction**

6.62 This category is applicable to Indian Railways for traction purposes for loads more than 100 kW/108 kVA.

# DMRC

6.63 This category is available to Delhi Metro Rail Corporation (DMRC) to run its operations (other than construction projects). The Commission has decided to increase the applicable energy charges for DMRC to meet the cost of supply. The commercial load at DMRC stations shall be metered and billed separately as per the relevant tariff category.



### **Temporary Supply**

6.64 The Commission does not propose any change in the existing tariff methodology for temporary supply as mentioned in the Tariff Schedule.

#### Delhi Jal Board (DJB)

- 6.65 In the Tariff Order for FY 2009-10, the Commission had decided to depart from the earlier practice of charging DJB consumption at MLHT tariff by creating a special category for DJB which provides an important public utility service. The special category created is being continued in view of the nature of consumption of DJB.
- 6.66 For the purpose of conversion of kW to kVA, the actual power factor of the relevant billing cycle shall be considered for the computation of fixed charges.

#### **Delhi International Airport Limited (DIAL)**

6.67 The Commission, in the Tariff Order for 2009-10 has already created a separate category to cover the consumption for the infrastructure facilities at the airport. However in view of the fact that DIAL is providing services to consumers belonging to higher strata, it will not be fair to give the tariff at par with DJB, which is providing essential services to all consumers including the lowest strata of the society. Accordingly, the Commission has decided to give DIAL, a tariff, which shall be higher than that of DJB but lower than that of Non Domestic HT consumers.

	Category	Fixed Charges <sup>1</sup>	Energy Charges
1	Domestic		
1.1	Domestic		
a.	Upto 2 kW connected load		
	0-200 units	30 Rs/month	300 Paisa/kWh
	201-400 units	30 Rs/month	480 Paisa/kWh
	Above 400 units	30 Rs/month	570 Paisa/kWh
b.	Between 2-5 kW connected load		
	0-200 units	75 Rs/month	300 Paisa/kWh
	201-400 units	75 Rs/month	480 Paisa/kWh
	Above 400 units	75 Rs/month	570 Paisa/kWh
c.	Above 5 kW connected load		
	0-200 units	15 Rs /kW/month	300 Paisa/kWh
	201-400 units	15 Rs /kW/month	480 Paisa/kWh
	Above 400 units	15 Rs /kW/month	570 Paisa/kWh
1.2	Single delivery point on 11 kV for CGHS		
	First 44.4%	15 Rs /kW/month	300 Paisa/kWh

# **Tariff Schedule**



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### NORTH DELHI POWER LIMITED

	Category	Fixed Charges <sup>1</sup>	Energy Charges		
	Next 44.4%	15 Rs /kW/month	480 Paisa/kWh		
	Next 11.2%	15 Rs /kW/month	570 Paisa/kWh		
	In case of cooperative group housing societies having independent connection for common facily through separate meter, energy charges shall be billed at highest slab tariff for domestic category Rebate of 15% is admissible on energy charges				
2	Non-Domestic				
2.1	Non- Domestic Low Tension (NDLT)				
	Up to 10 kW	70 Rs/kW/month	650 Paisa/kWh		
	Between 10 kW(11kVA) -100 kW (108 kVA)	90 Rs/kVA/month	610 Paisa/kVAh		
	Greater than 100 kW / 108 kVA (415 volts) (No Supply on LT for load > 215 kVA)	150 Rs/kVA/month	700 Paisa/kVAh		
2.2	Non-Domestic High Tension (NDHT)				
	For supply at 11 KV and above (for load greater than 108 kVA)	125 Rs/kVA/month	590 Paisa/kVAh <sup>2</sup>		
3	Industrial				
3.1	Small Industrial Power (SIP) [less than 200 kW/215 kVA]				
	Up to 10 kW	60 Rs/kW/month	600 Paisa/kWh		
	Between 10 kW(11kVA)-100kW (108 kVA)	70 Rs/kVA/month	550 Paisa/kVAh		
	Greater than 100 kW/108 kVA (415 volts) (No Supply on LT for load > 215 kVA)	150 Rs/kVA/month	650 Paisa/kVAh		
3.2	Industrial Power on 11 kV Single Delivery Point for Group of SIP Consumers	70 Rs/kVA/month	480 Paisa/kVAh		
3.3	Large Industrial Power (LIP) (Supply at 11 kV and above)	125 Rs/kVA/month	530 Paisa/kVAh <sup>2</sup>		
4	Agriculture	15 Rs/month/kW	180 Paisa/kWh		
5	Mushroom Cultivation	30 Rs/month/kW	360 Paisa/kWh		
(					
6	Public Lighting Streat Lighting <sup>3</sup>		560 Daira /I-W/I-		
	Street Lighting <sup>3</sup>		560 Paisa/kWh		
	Signals and Blinkers		560 Paisa/kWh		
7	Delhi Jal Board	150 Rs/kVA/month	560 Paisa/kVAh <sup>2</sup>		
8	Delhi International Airport Limited	150 Rs/kVA/month	575 Paisa/kVAh <sup>2</sup>		



### NORTH DELHI POWER LIMITED

	Category	Fixed Charges <sup>1</sup>	Energy Charges
9	Railway Traction <sup>4</sup> (Supply at 33 kV and 66 kV)	150 Rs/kVA/month	450 Paisa/kVAh <sup>2</sup>
10	DMRC (Supply at 220 kV and 66 kV)	100 Rs/kVA/month	380 Paisa/kVAh
11	Temporary Supply		
9.1	For a total period of		
А	Less than 16 days	50% of the relevant category	higher by 30% (temporary surcharge) of the relevant category of tariff
в	More than or equal to 16 days	same as that of relevant category	higher by 30% (temporary surcharge) of the relevant category of tariff
9.2	For residential cooperative group housing connections	Same as that of relevant category	domestic tariff without any temporary surcharge
9.3	For religious functions of traditional and established characters and cultural activities	Same as 1.2	Same as 1.2 without temporary surcharge
9.4	For major construction projects	Same as that of relevant category	Same as that of relevant category with temporary surcharge of 30%
9.5	For threshers		
A	During the threshing season for 30 days	Electricity Tax of MCD : Rs 150 per connection	Flat rate of Rs 3,600
В	For extended period		On pro-rata basis for each week or part thereof

# Notes on Superscripts

- 1 For all categories other than Domestic, Fixed/demand charges are to be levied on sanctioned load or MDI reading, whichever is higher, on per kW/kVA or part thereof, basis. Where the MDI reading exceeds sanctioned load, a surcharge of 30% shall be levied on the fixed charges corresponding to excess load in kW/kVA for such billing cycle only. Wherever, sanctioned load/ contract demand is in kW/HP, the kVA shall be calculated on basis of actual power factor of the consumer, for the relevant billing cycle.
- 2 Additional rebate of 2.5% on the energy charges on 11 kV rates for availing supply at 33/66 kV and 4% for supply at 220 kV shall be admissible.
- 3 Maintenance Charges on street lights would be additional to the specified tariff @ Rs. 84/light point/month and material cost at the rate Rs 19/point/month as per the Commission's Order dated 22 September 2009 till further amended by the Commission. These charges will be payable to the DISCOM only if maintenance services are provided by the DISCOM.



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4 Tariffs for Northern Railways Traction are based on the supply being given through a single point delivery and metering point at single voltage. An additional capacity blockage charge is also applicable which is to be calculated as Rs 1260 x (2.97 A +5) where A is contract/maximum demand, whoever is higher, in MVA subject to a minimum of Rs 25000.



# **Other Terms and Conditions of Tariff**

	Category	Availability	Character of Service
1. Domestic	1.1 Domestic (Individual connection and Single Delivery Point )	<ul> <li>A) Available to following categories of consumers:</li> <li>Residential consumers</li> <li>Hostels of recognized/aided institutions of Municipal Corporation of Delhi or Government of the NCT of Delhi.</li> </ul>	AC 50 Hz, single phase, 230 Volts for load upto 10 kW & AC 50 Hz, three phase, 400 Volts for loads beyond 10 kW
		Staircase lighting in residential flats separately metered. Compound lighting, lifts and water pumps etc., for drinking water supply and fire fighting equipment in residential complexes. In cooperative group housing societies etc. for bonafide use of lighting/fan and power, subject to the provision that the supply is at single delivery point for combined lighting/fan & power.	
		<ul> <li>B) It is also available to following consumers.</li> <li>Dispensary/Hospitals/Public</li> <li>Libraries/School/ College/Working</li> <li>Women's Hostel/Orphanage/Charitable</li> <li>homes run by the Municipal Corporation of</li> <li>Delhi or the Government of the NCT of</li> <li>Delhi.</li> <li>Small Health Centers approved by the</li> </ul>	
		Department of Health, Government of NCT of Delhi for providing Charitable Services only. Recognized Centers for welfare of blind, deaf and dumb, spastic children, physically handicapped persons, Shelters homes for homeless people approved by the Government of NCT of Delhi. C) Places of worship.	
		<ul> <li>D) Cheshire homes/orphanage.</li> <li>E) Electric crematoriums.</li> <li>F) Professionals namely Doctor, Lawyer, Architect, Chartered Accountant, Company Secretary, Cost and Works Accountant, Engineer, Town Planner, Media professionals and Documentary Film maker may utilize the domestic connection at their residence, for carrying out their professional</li> </ul>	
		activities, provided the area used for professional activity does not exceed the area permitted to be used for such activity in a residential area under the applicable Master Plan for Delhi and the local bye-laws, which at present is 50% of the covered area. G) Available, for loads upto 21 kW, to farm	



	Category	Availability	Character of Service
		<ul> <li>houses for bonafide domestic self use and bounded farm houses having minimum 50% of the total land for agriculture/vegetable cultivation.</li> <li>H) The consumers running small commercial establishments from their households in JJ Clusters shall be charged domestic tariff provided that the total consumption of electricity in a month does not exceed 200 units.</li> <li>I) Cattle / Dairy Farm/ Dhobi Ghat with a total consumption of not more than 200 units/month and connected load of upto 2kW.</li> </ul>	
	1.2 Domestic Connection on 11 kV single delivery point	Same as 1.1(A) and for CGHS flats and loads above 100 kW in case of individual	AC 50 Hz, three phase, 11 kV; on single delivery point
2. Non- Domestic	2.1.1 Non- Domestic (Low Tension) – NDLT	Available to all consumers having load (other than the industrial load) upto 100 kW for lighting, fan & heating/cooling power appliances in all non-domestic establishments as defined below: Hostels (other than those recognized/aided institutions of Municipal Corporation of Delhi or Government of the NCT of Delhi) Schools/colleges (Other than those run by Municipal Corporation of Delhi or the Government of NCT of Delhi) Auditoriums Hospitals, nursing homes/diagnostic centers other than those run by Municipal Corporation of Delhi or the Government of NCT of Delhi. Railways (other than traction) Hotels and restaurants Cinemas Banks Petrol pumps All other establishments, i.e., shops, chemists, tailors, washing, dyeing etc. which do not come under the Factories Act. Cattle farms, fisheries, piggeries, poultry farms, floriculture, horticulture, plant nursery Farm houses being used for commercial activity DMRC for its commercial activities other than traction. Ice-cream parlours and Any other category of commercial consumers not specified/covered in any other category in this Schedule	AC 50 Hz, single phase, 230 Volts up to 10 kW load; AC 50 Hz, 3 phase, 415 Volts for loads above 10 kW (11 kVA) and upto 100 kW (108 kVA)
	2.1.2 Non- Domestic High Tension-I on 11	Available to commercial complexes having load more than 100kW/108 kVA for group of	AC 50 Hz, 3 phase, 11 kV



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	Category	Availability	Character of Service
	kV Single Delivery Point NDHT (Merger	consumers for non-domestic use.	
	of erstwhile NDLT-II and MLHT category)	Available to consumers having load (other than industrial load) above 100 kW/108 kVA in Non-Domestic establishments including DDA/MCD and supply to Delhi Metro Rail Corporation (DMRC) Ltd. for their on going construction projects etc and for commercial purposes other than railway traction.	
3. Industrial	3.1.1 Small Industrial Power (SIP)	Available to Industrial consumers with load up to 200 kW/215 kVA including lighting, heating and cooling load.	AC 50 Hz, single phase, 230 Volts; AC 50 Hz, 3 phase, 415 Volts
	3.1.2 Industrial Power (SIP) on 11 kV Single Delivery Point for Group of SIP Consumers	On single delivery point for group of SIP consumers provided load of any individual consumer does not exceed 100 kW/108 kVA	AC 50 Hz, 3 Phase, 11 kV
	3.2 Large Industrial Power (LIP)	Available to large industrial consumers having load above 100 kW /108 kVA including lighting load.	AC 50 Hz, 3 phase, 11 kV;
4. Agricultur e		Available for load up to 10 kW for tube wells for irrigation, threshing, and kutti-cuting in conjunction with pumping load for irrigation purposes and lighting load for bonafide use in Kothra.	AC 50 Hz, Single / Three Phase, 230/415 Volts
5. Mushroom cultivation		Available for mushroom growing/cultivation upto 100 kW/108 kVA.	AC 50 Hz, 3 Phase, 415 Volts up to 100 kW
6. Public Lighting	6.1 Street lighting	Available to all street lighting consumers including MCD, DDA, PWD/CPWD, Slums department/DSIIDC/MES/CGHS etc.	AC 50 Hz, Single /three Phase, 230/415 Volts
	6.2 Signals & Blinkers	Available for traffic signals and blinkers of Traffic Police	AC 50 Hz, Single Phase, 230 Volts
7. Railway Traction (other than DMRC)		Available for railway traction for connected load above 100 kW/108 kVA.	AC 50 Hz, Three phase, 220/66/33 kV
8. Delhi Jal Board		Available to DJB for pumping load & Water Treatment Plants	AC 50 Hz, 3 phase, 11 kV
8. Delhi Internatio nal Airport Limited		Available to DIAL	AC 50 Hz, 3 phase, 220/66/33 kV
8. Delhi Metro Rail Corporatio n		Available to Delhi Metro Rail Corporation (DMRC) (not for construction projects)	AC 50 Hz, 3 phase, 220/66/33 kV
9.Tempora	9.1(a) for less	Available as temporary connection under the	AC 50 Hz, single phase, 230



	Category	Availability	Character of Service
ry Supply	than 16 days	respective category	Volts;
	9.1(b) for more than or equal to 16 days		AC 50 Hz, 3 phase, 400 Volts; AC 50 Hz, three phase, 11
	9.2 for residential cooperative group housing connections	Same as that of relevant category	kV
	9.3 for religious functions of traditional and established characters and cultural activities	Provided for religious functions of traditional and established characters like Ram lila, Dussehra, Janmashtami, Nirankari Sant Smagam, Gurupurb, Durga Puja, Id, Christmas celebrations, Easter, Pageants and cultural activities like NCC camps, scouts & guides camps etc. (normally for a period less than 10 days).	
	9.4 for major construction projects	With loads more than 10 kW	
	9.5 for threshers	During the threshing season	

### **Electricity taxes and other levies**

6.68 The rates stipulated in the Schedule are exclusive of electricity tax and other taxes and charges, as levied from time to time by the Government or any other competent authority, which are payable extra.

### Surcharges

6.69 All surcharges shall be levied on the basic tariff applicable to the category of use or category of sanction, whichever has higher tariff.

# Payments

- 6.70 In the event of the electricity bill rendered by the licensee, not being paid in full within the time specified on the bill, a surcharge @ 1.5% on the principal amount of bill which has not been paid shall be levied for each 30 days successive period or part thereof until the payment is made in full without prejudice to the right of the licensee to disconnect the supply after due date in the event of non-payment in accordance with section 56 of Electricity Act, 2003. This will also apply to temporary connections, where payment of final bill amount after adjustment of consumption deposit, is not made by due date.
- 6.71 The Commission directs the Petitioner, that in case the bill for consumption of electricity is more than Rs. 4,000, payment for the bill shall only be accepted by the Petitioner by means of an Account Payee cheque/DD. However, the Commission has considered that the blind consumers shall be allowed to make payment of electricity bills, for any amount, through cash.



#### Interpretation/clarification

6.72 In case of doubt or anomaly, if any, in the applicability of tariff or in any other respect, the matter will be referred to the Commission and Commission's decision thereon shall be final and binding.



# A7: DIRECTIVES

- 7.1 Distribution licensee is directed to post the monthly zone/district wise AT&C Loss data giving break-up of energy input, energy billed and revenue realization on its website within fifteen days from the end of the month.
- 7.2 Distribution licensee is directed to reduce AT&C losses by at least 10% in respect of those zones/districts which are currently having losses in excess of 40% within one year i.e. by August, 2012. These targets shall have to be met by Distribution licensee irrespective of the overall AT&C loss achievement targets specified in this Order. Failure to do so will invite penalties.
- 7.3 All data required for True-Up (including kWh & kVAh for the consumers billed on kVAh basis) shall be maintained & shall not be deleted from the data base prior to issuance of order for True-Up for that period by the Commission.
- 7.4 The Commission directs the Distribution licensee to get the Form 2.1(a) audited by the Statutory auditors on a quarterly basis. The auditor certificate in this regards shall be filed in the Commission within fifteen days from the end of the quarter.
- 7.5 The Commission directs the Distribution licensee to show power station wise power purchase quantum and cost along with break up under various heads in its audited accounts.
- 7.6 The Distribution Licensee shall continue to comply with guidelines for procurement of short-term power purchase issued by the Commission. The Distribution licensee is further directed to take necessary steps to restrict the cost of power procured through short term contracts at Rs.5 per kwh. Further in case of short term power purchase at a rate higher than the above ceiling rate (of Rs.5 per kwh), the impact of such purchase on total short term power purchase shall not exceed 10 paise /kWh during the Financial Year. The Commission shall approve the short term power purchase as above subject to any major exceptions/circumstances as may be brought to the notice of the Commission with full justification within 24 hours.
- 7.7 Distribution licensee shall be responsible for making timely payment of bills/dues to central & state generating stations and transmission utilities. The Commission shall not allow surcharge as a pass through in the ARR, if paid by the Distribution licensee on account of delayed payments.
- 7.8 The Commission has already directed that the Distribution licensee shall complete the GIS mapping of all the divisions by end of September, 2011 and submit the data to Delhi State Spatial Data Infrastructure Projects (DSSDIP). The Distribution licensee shall upload the same on its website division-wise by 15th October, 2011. Further, Distribution licensees shall prepare the "Asset Register" and submit to the Commission by 31st December, 2011. Any slippage in this regard will result in no further approvals being given to capital investment proposals till this task is completed.



- 7.9 Distribution Licensee is hereby directed to meter electricity consumption in its offices, grid sub-stations, consumer care centers etc. within 2 months.
- 7.10 The Commission directs the Distribution Licensee to conduct a Safety Audit and ensure proper fencing of distribution sub-station, grounding of the fencing as per Code of Practice for Earthing and proper Locking arrangements for the fencing.
- 7.11 The Distribution licensee shall formulate a protocol regarding the procedure to be followed for meter sealing/de-sealing within one month of the issue of this Tariff Order and submit the same to the Commission for approval.
- 7.12 The Distribution Licensee shall submit a Protocol for testing of meter within one month of the issue of this Tariff Order.
- 7.13 The Distribution licensee shall issue bilingual bills to all the consumers commencing not later than 2 months of the date of issue of this Tariff Order.
- 7.14 With respect to AT&C losses, the Commission directs the Petitioner for the following:
  - (a) Submit Form 2.1(a) on monthly basis along with billing database to the Commission within the first week of the following month.
  - (b) Submit category wise revenue collection on monthly basis along with the supporting documents within the first week of the following month.
  - (c) Include Form 2.1(a) in the quarterly and annual Balance sheet.
  - (d) Include the category wise / slab wise consumer details i.e. no of consumer, connected load, sales, power factor, revenue from fixed charges, revenue from demand charges in the quarterly and annual balance sheet.
  - (e) Include source wise power purchase and sale details i.e. Quantum in MU and Rs Cr in the quarterly and annual balance sheet.
  - (f) Submit monthly report to the Commission giving details of on monthly category wise Consumer addition and their detail within the first week of the following month.
  - (g) Submit monthly report to the Commission giving details of on no. of connection disconnected / reconnected and their detail within the first week of the following month.
  - (h) Submit monthly report to the Commission on bill correction / JE entries within the first week of the following month.
  - (i) Submit monthly report to the Commission on change of consumer category for consumer within the first week of the following month.



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7.15 The distribution licensee shall restrict the open cycle generation of its Rithala Combined Cycle Plant strictly to the extent required for trial operations of both open cycle and combined cycle, under intimation to SLDC, who shall certify that the operation was strictly in accordance with the requirements of trial operations. The Commission shall not permit any increase in capitalization due to difference between open cycle variable cost and UI rates during that period, beyond the level of open cycle operation approved by SLDC.

