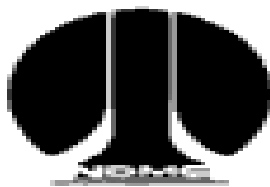


**BEFORE THE
HON'BLE DELHI ELECTRICITY REGULATORY COMMISSION,
DELHI**

Final True up Petition for FY 2007-08 to FY 2011-12 as per the Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2007 & Annual Revenue Requirement for FY 2013-14 as per the Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011



Submitted By:

NEW DELHI MUNICIPAL COUNCIL

PALIKA KENDRA, NEW DELHI-110001

JANUARY 2013





**Before The
Delhi Electricity Regulatory Commission, Delhi**

IN THE MATTER OF: Filing of True up petition for the first control period (FY 2007-08 to FY 2011-12) and review of Aggregate Revenue Requirement (ARR) for the FY 2013-14 under Section 62 of the Electricity Act, 2003

AND

IN THE MATTER OF: New Delhi Municipal Council
Palika Kendra, Sansad Marg,
New Delhi - 110001
("THE PETITIONER")

The applicant respectfully submits as hereunder:-

- 1.1 That the Petitioner (hereinafter referred to as "NDMC" or "Petitioner") is a Municipal Council entrusted with the distribution of electricity to the consumers in the New Delhi area under Section 195 to 201 of the New Delhi Municipal Council Act 1994.
- 1.2 That NDMC has the powers and obligations of a Licensee under the Indian Electricity Act 1910 in respect of the New Delhi area.
- 1.3 That under Section 200 of the New Delhi Municipal Council Act 1994, NDMC has the power to fix charges to be levied for the electricity supplied by it, subject to



the provisions of any law for the time being in force.

- 1.4 That the Govt. of India notified the Electricity Act, 2003 on 10th June, 2003 repealing the Indian Electricity Act-1910, the Electricity (Supply) Act 1948 and the E.R.C. Act, 1998. Among the tariff related provisions, the State Electricity Regulatory Commission (SERC) has to be guided by National Electricity Policy and National Tariff Policy. The generation, transmission and distribution tariff have to be determined separately. The Delhi Electricity Regulatory Commission (DERC) has framed Regulations specifying the terms and conditions for determination of tariff. With the expiry of Policy direction period (2002-2007), the Delhi Electricity Regulatory Commission (hereinafter referred as "The Commission") issued regulations vide notification dated 30th May, 2007 specifying Terms and Conditions for Determination of Tariff for Generation, Transmission and Distribution of electricity under the Multi Year Tariff (MYT) framework for the period FY08 – FY11. The Hon'ble Commission subsequently issued a letter no. F.3 (312)/Tariff/DERC/2011-12/4481 dated 24.02.2011, intimating all the distribution utilities in Delhi for filing of ARR petition for the FY 12 and true up for the FY 10 as per the terms and conditions for determination of tariff for distribution of electricity under the first Multi Year Tariff (MYT) framework.
- 1.5 The Hon'ble Commission subsequently issued regulations vide notification dated 2nd December 2011, specifying Terms and Conditions for Determination of Tariff for Generation, Transmission and Distribution of electricity under the Multi Year Tariff (MYT) framework for the second control period i.e. period FY13 – FY15.
- 1.6 In accordance with the provisions of the DERC MYT Regulation, 2007 for the first control period notified by the Hon'ble Commission, NDMC is submitting this application for true-up for 2007-08 to FY 2011-12 and approval of the Aggregate Revenue Requirement (ARR) for the FY 2013-14 in accordance with the provisions of the DERC MYT Regulation, 2011 for the second control period notified by the



Hon'ble Commission.

- 1.7 While submitting this Tariff Petition, NDMC has made efforts to adhere to most of the regulations framed by the Hon'ble Commission.

That this Petition includes the following documents:

- 1.8 Affidavit verifying the Petition and the Power of Attorney for filing the same (attached in Volume I of this Petition).
- 1.9 Demand Draft No. _____ dated _____ drawn on _____ for an amount of Rs. _____ towards filing fee.
- 1.10 MYT Formats (Volume II of this petition)
- 1.11 Soft copy of the Petition
- 1.12 NDMC requests the Hon'ble Commission to approve True Up for FY 2007-08 to FY 2011-12 and revised Annual Revenue Requirement for FY 2013-14.

Prayers to the Hon'ble Commission

- 1.13 NDMC respectfully prays that the Hon'ble Commission may:
- (a) Examine the proposal submitted by NDMC for a favorable dispensation as detailed in this petition.
 - (b) Consider the submissions and approve true up for FY 2007-08 to FY 2011-12 as per the provisions of MYT Regulation 2007 and review the annual revenue requirement for FY 2013-14 as per the provisions of MYT Regulation 2011.
 - (c) Condone any inadvertent omissions/errors/shortcomings and permit NDMC to add/change/modify/alter this filing and make further submissions as may be required at a future date.



- (d) Pass such further order, as the Hon'ble Commission may deem fit and proper keeping in view the facts and circumstances of the case.

New Delhi Municipal Council

New Delhi

Dated:



TABLE OF CONTENTS

1. INTRODUCTION	11
NDMC OVERVIEW.....	11
PROCEDURAL HISTORY	12
CURRENT PETITION.....	12
CONTENTS OF THE PETITION	13
2. TRUE UP PETITION	15
PREAMBLE.....	15
CATEGORY WISE SALES	15
REVENUE BILLED	16
REVENUE COLLECTED	17
POWER PURCHASE	18
ENERGY REQUIREMENT & ENERGY BALANCE	18
A T & C LOSSES	19
POWER PURCHASE COST.....	20
OPERATION & MAINTENANCE EXPENSES	22
EMPLOYEE COST	22
REPAIR & MAINTENANCE EXPENSES	22
ADMINISTRATIVE & GENERAL EXPENSES	22
OPERATION AND MAINTENANCE EXPENSES	22
ADMINISTRATIVE EXPENSES AND CIVIL ENGINEERING DEPARTMENT EXPENSES.....	23
GROSS FIXED ASSETS	24
DEPRECIATION	25
WORKING CAPITAL.....	26
RETURN ON CAPITAL EMPLOYED (RCOE)	27
NON-TARIFF INCOME.....	28
AGGREGATE REVENUE REQUIREMENT AND REVENUE FROM SALE OF POWER	28
REVENUE SURPLUS/GAP FOR FY 2007-08.....	29



REVENUE SURPLUS/GAP FOR FY 2008-09	30
REVENUE SURPLUS/GAP FOR FY 2009-10.....	31
REVENUE SURPLUS/GAP FOR FY 2010-11.....	32
REVENUE SURPLUS/GAP FOR FY 2011-12.....	33
REVENUE GAP FOR THE FIRST CONTROL PERIOD ALONG WITH CARRYING COST	34
3. AGGREGATE REVENUE REQUIREMENT FOR FY 2012-13 & FY 2013-14	36
POWER PURCHASE	37
ENERGY REQUIREMENT & ENERGY BALANCE	38
A T & C LOSSES	39
OPERATION & MAINTENANCE EXPENSES	39
EMPLOYEE COST	40
REPAIR & MAINTENANCE EXPENSES	40
ADMINISTRATIVE & GENERAL EXPENSES	40
OPERATION AND MAINTENANCE EXPENSES	40
ADMINISTRATIVE EXPENSES AND CIVIL ENGINEERING DEPARTMENT EXPENSES.....	41
GROSS FIXED ASSETS	42
DEPRECIATION	43
WORKING CAPITAL.....	44
RETURN ON CAPITAL EMPLOYED	45
NON-TARIFF INCOME.....	45
AGGREGATE REVENUE REQUIREMENT	46
REVENUE GAP	47
TARIFF REVISION PROPOSAL	48
4. RESPONSE TO DIRECTIVES ISSUED BY THE HON'BLE COMMISSION	49



LIST OF TABLES

Table 1 : Category-wise Consumer details.....	15
Table 2 : Category-wise Energy Sales.....	16
Table 3 : Month-wise Energy Sales	17
Table 4 : Revenue Collected.....	17
Table 5 : Power Purchase.....	18
Table 6 : Energy Requirement & Energy Balance	19
Table 7 : AT&C losses	20
Table 8 : Power Purchase Cost.....	21
Table 9 : Revenue from Sale of Surplus Power	21
Table 10 : Operation & Maintenance Expenses.....	23
Table 11 : Administrative and Civil Engineering Department Expenses	24
Table 12 : Gross Fixed Assets	25
Table 13 : Depreciation	25
Table 14 : Working Capital	26
Table 15 : Return on Capital Employed	27
Table 16 : Non-Tariff Income for FY 2011-12.....	28
Table 17 : Revenue Gap for FY 2007-08.....	29
Table 18 : Revenue Gap for FY 2008-09.....	30
Table 19 : Revenue Gap for FY 2009-10.....	32
Table 20 : Revenue Gap for FY 2010-11.....	33
Table 21 : Revenue Gap for FY 2011-12.....	34
Table 22 : Revenue Gap for the first Control Period.....	35
Table 23 : Category wise Energy Sales	36
Table 24 : Power Purchase Cost.....	37
Table 25 : Energy Requirement & Energy Balance	38
Table 26 : AT&C losses	39
Table 27 : Operation & Maintenance Expenses.....	40
Table 28 : Admin. and Civil Engineering Department Expenses	42



Table 29 : Gross Fixed Assets	43
Table 30 : Depreciation	43
Table 31 : Norm for calculation of Working Capital.....	44
Table 32 : Working Capital	44
Table 33 : Return on Capital Employed	45
Table 34 : Non-Tariff Income	46
Table 35 : Aggregate Revenue Requirement	46
Table 36 : Revenue from Sale of Power	47
Table 37 : Revenue Gap	48
Table 38: Compliance of Directives.....	49



1. Introduction

NDMC Overview

- 1.1 New Delhi Municipal Council (NDMC) is a Municipal Council entrusted with the distribution of electricity to the consumers in the New Delhi area under Section 195 to 201 of the New Delhi Municipal Council Act 1994. The NDMC has the obligations of a Licensee under the Indian Electricity Act 1910 in respect of the New Delhi Area.
- 1.2 Under Section 200 of the New Delhi Municipal Council Act 1994, NDMC has the powers to fix charges to be levied for the electricity supplied by it, subject to the provisions of any law for the time being in force.
- 1.3 Till 31st 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 28th June, 2006, GoNCTD issued a set of Policy Directions for making power supply arrangements in Delhi from 1st April, 2007. These Policy Directions were issued under Section 108 of the Electricity Act 2003 (hereinafter referred to as the 'Act').
- 1.4 With effect from 1st April, 2007, the responsibility for arranging supply of power in Delhi for its own licensed area rests with the NDMC in accordance with the provisions of the Electricity Act 2003 and also the National Electricity Policy.
- 1.5 The business of Bulk Supply of electricity is no longer a part of the business of DTL, and the same is now vested with the NDMC & other Distribution Licensees (DISCOMs) of the State, w.e.f 1st April, 2007.



Procedural History

- 1.6 NDMC had submitted its Aggregate Revenue Requirement (ARR) and tariff petition for FY 2005-06, FY 2006-07 and the Hon'ble Commission passed the tariff order on these petitions.
- 1.7 Subsequently, NDMC had submitted its first Multi Year tariff petition for FY 2007-08 to FY 2010-11 along with True Up petition for FY 2006-07. The Hon'ble Commission passed the tariff order on 07th March 2008.
- 1.8 NDMC submitted its provisional True Up petition for FY 2007-08 and Annual Revenue Requirement for FY 2010-11 and the Hon'ble Commission passed the tariff order in June, 2009.
- 1.9 NDMC submitted its provisional True Up petition for FY 2008-09 & ARR for FY 2010-11 in December 2009. Also, NDMC submitted its provisional True Up petition for FY 2009-10 & ARR for FY 2011-12 in March 2011. The Hon'ble Commission passed the tariff order on the same in August, 2011.
- 1.10 Subsequently, NDMC had submitted its second Multi Year tariff petition for FY 2012-13 to FY 2014-15 along with annual performance review of FY 2011-12 and True Up for FY 2010-11 in February 2012. The Hon'ble Commission passed the tariff order on same in July 2012.

Current Petition

- 1.11 As per the DERC MYT Regulations, 2007 issued by the Hon'ble Commission for the first control period, NDMC is required to file True up petition for trueing up of return on capital employed and depreciation at the end of control period. It is also required to file petition for review of ARR for FY 2013-14 as per the DERC MYT Regulations, 2011 issued by the Hon'ble Commission for the second control period. In compliance of this



regulatory obligation, NDMC is filling this petition for truing of expenses of first control period and annual review of ARR for FY 2013-14.

1.12 The objective of the petition is to seek the approval of the Hon'ble Commission for True up of ARR of NDMC for the first control period FY 2007-08 to FY 2011-12 and review of annual revenue requirement for FY 2013-14.

1.13 NDMC has made genuine efforts for compiling all relevant information relating to the tariff petition as required by the regulations issued by the Hon'ble Commission and has also made every effort to ensure that information provided to the Hon'ble Commission is accurate and free from material errors. However, there may be certain deficiencies. Hence, NDMC prays to the Hon'ble Commission that the information provided be accepted for the current filing. Any additional information required by the Hon'ble Commission shall be made available to the extent the same is available with NDMC.

Contents of the Petition

1.14 NDMC is submitting true up petition for FY 2007-08 to FY 2011-12 on the basis of the principles outlined in the Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff Regulations, 2007 notified by DERC along with review of its ARR and Tariff petition for the determination of tariff for FY 2013-14 on the basis of the principles outlined in the Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff Regulations, 2011 notified by DERC. NDMC has studied the past trends and taken cognizance of other internal and external developments to estimate the likely performance for FY 2013-14.

1.15 The following sections explain in detail truing up of the various expenses for the first control period and the basis offorecasts of the following elements for FY 2013-14:

- i) Category wise Energy Sales & Revenues at existing tariffs
- ii) T&D Losses, AT&C Losses and Energy Requirement



iii) Determination of Annual Revenue Requirement by forecast of the following costs, other income & returns:

- Power Purchase Cost
- Operation and maintenance Expenses
- Admin & Civil Engineering Department Cost
- Depreciation
- Return on Capital Employed
- Non-Tariff Income



iv)

2. True up Petition

Preamble

1.16 In this section of the petition, NDMC is carrying out the True-up exercise for Return on Capital Employed and Depreciation for FY 2007-08 to FY 2011-12 and true up of all expenses for FY 2011-12 based on the actual data of each year.

Category wise Sales

1.17 In terms of the Section 4.2(f) and Section 4.11 of the MYT Regulations, 2007, the variation in revenue/ costs on account of uncontrollable factors like Sales and Power Purchase would be true up annually. The open access transactions shall not form part of sales. Energy sales of the FY 2007-08 to FY 2010-11 have been true up by the Hon'ble Commission in the respective true up orders for the said financial year. The category wise number of consumer, connected load and actual energy sales for FY 2011-12 is shown below:

Table 1 : Category-wise Consumer details

As on 31.03.2012

Sr. No.	Connection Type	Sanction Load	No of Connections
1	Domestic (Light/Fan/Power single Delivery Point)	123,383	43,985
2	Non-Domestic (LT) upto <5 kW	19,594	13,894
3	LT above 100 kW where built up space for S/s is provided by the consumer	119,139	455
4	Non-Domestic (LT) upto >5 kW to 100 kw	112,948	7,153
5	HT above 100 kW (supply on 11 kW)	211,319	308
6	Small Industrial Power (incl Light)	124	10
7	Street Lighting	1,986	77
8	NDMC employee	3,362	2,474
9	DMRC	8,500	1
10	LT above 100 kW (from NDMC Mains)	2,044	15
	Total	602,399	68,372



Table 2 : Category-wise Energy Sales

in MU

Sr. No.	Consumer Category	Petitioner's Submission	Approved	Actual
1	Domestic	255.15	258.88	243.89
	Single Delivery Point	88.4	94.34	86.46
	Separate Delivery Point	146.74	145.87	141.63
	Domestic Power	20.02	18.66	15.80
2	Non Domestic	267.81	254.89	247.70
	Single Phase	53.03	50.1	48.95
	Three Phase	214.78	204.8	198.75
3	Mixed Load	678.14	726.17	713.78
	Supply at 11 KV (HT)	466.3	514.96	510.99
	Supply on LT where supply is given from NDMC sub station	4.45	3.72	3.96
	Supply on LT where applicant provides built up space for sub station	207.4	207.48	198.83
4	Small Industrial Power	0.45	0.31	0.31
5	Public Lighting	10.1	8.81	12.95
6	Others	9.01	8.66	7.69
7	DMRC		36	20.23
	Total	1220.66	1293.72	1,246.54

1.18 The Hon'ble Commission is requested to allow the actual sales of 1246.54 MU for FY 2011-12 and approve the power purchase requirement accordingly.

Revenue Billed

1.19 The month wise billed revenue as per the actual information available for FY 2011-12 with NDMC is tabulated below:



Table 3 : Month-wise Energy Sales

Rs in Crores

Sr. No	Month	Energy Charge	Demand Charge	LT Surcharge	Total
1	Apr-11	25.98	4.50	0.74	31.23
2	May-11	44.97	4.53	0.86	50.36
3	Jun-11	38.31	4.45	1.08	43.84
4	Jul-11	62.18	4.74	1.08	68.01
5	Aug-11	42.17	4.89	1.12	48.18
6	Sep-11	78.81	5.00	1.19	85.00
7	Oct-11	49.64	5.13	0.02	54.79
8	Nov-11	56.58	5.33	-	61.91
9	Dec-11	38.46	5.12	-	43.58
10	Jan-12	53.13	5.85	-	58.98
11	Feb-12	38.47	4.93	-	43.40
12	Mar-12	51.54	5.15	-	56.69
13		580.24	59.62	6.10	645.96

Revenue Collected

1.20 The total revenue collected is Rs. 642.18 Crores as per the actual information available for FY 2011-12 with NDMC is tabulated below:

Table 4 : Revenue Collected

Rs. In Crores

Sr. No.	Category	FY 2011-12 (Actual)
1	Tariff Revenue realized	533.96
2	Demand Charges realized	57.05
3	LT surcharge collected	6.10
4	Total	597.11
5	Arrears collected (FY 2011-12)	29.94
6	Transfer Entry from NDMC for usage of electricity by NDMC buildings	15.13
7	Total Tariff Revenue Collected	642.18
8	Revenue Billed	645.96
9	Collection Efficiency	99.4%



Power Purchase

1.21 NDMC has allocations of power from Dadri TPS, BTPS and Pragati Station. Power purchase of the FY 2007-08 to FY 2010-11 has been tried up the Hon'ble Commission in the respective true up orders for the said financial year.

1.22 The actual source-wise power purchased during FY 2011-12 along with that approved by the Hon'ble Commission is given below:

Table 5 : Power Purchase

For FY 2011-12

Sr. No.	Description	Petitioner's Submission (in MU)	Total Cost (Rs Crores)	Per Unit Rate (Rs.)	Approved in the Order (in MU)	Total Cost (Rs Crores)	Per Unit Rate (Rs.)	Actuals (in MU)	Total Cost (Rs Crores)	Actual Per Unit Rate (Rs.)
1	Dadri TPS	803.33	256.43	3.19	830.5	259.69	3.13	736.22	569.22	4.08
2	Badarpur TPS	664.8	264.49	3.98	720.03	287.73	4.00	658.81		
3	Pragati Power I	615.6	155.46	2.53	585.51	173.48	2.96	642.90		
4	PPCL-III	396.69	119.01	3.00	74.28	30.23	4.07	14.75	213.35	3.24
5	IPGCL – GTS	-	-	-	4.38	1.85	4.22	5.07	2.42	4.78
6	IPGCL – Rajghat	-	-	-	1.98	0.95	4.80			
7	Others (Bilateral/exchange/others)	-	-	-	-	-	-	26.23	14.34	5.47
8	Gross Power Purchase Quantum	2480.42	795.39	3.21	2216.68	753.97	3.40	2,083.98	799.33	3.84
9	Inter State Transmission Charges				18.68				22.95	
10	Intra State Transmission Charges				118.76				91.79	

1.23 The Hon'ble Commission is requested to allow the actual gross power purchase of 2083.98 MU.

Energy Requirement & Energy Balance

1.24 The gross energy requirement for NDMC is as follows:



Table 6 : Energy Requirement & Energy Balance

in MU

Sr. No	Description	Petitioner's Submission	Approved in the MYT Order	Actuals
1	Dadri TPS	803.33	830.50	736.22
2	Badarpur TPS	1,677.09	1,386.18	658.81
3	Pragati Power I			642.90
4	IPGCL – GTS			5.07
5	IPGCL – Rajghat			
6	Bawana	-	-	14.75
7	Bilateral/exchange	-	-	26.23
8	Gross Power Purchase	2,480.42	2,216.68	2,083.99
9	Inter-state transmission losses	68.35	33.39	27.07
10	Intra-state transmission losses		27.95	26.53
11	Power Available to NDMC	2,412.07	2,155.34	2,030.38
12	Sale of Surplus Power	1,055.78	724.24	621.79
13	Energy available for Retail Sale	1,356.30	1,431.11	1,408.59
14	Distribution loss (%)	10.00%	9.60%	11.51%
15	Distribution loss (MU)	135.63	137.39	162.06
16	Sale of Retail Power	1,220.67	1,293.72	1,246.54

1.25 NDMC has considered the interstate transmission losses of 3.55%¹ and intrastate transmission losses of 1.29%² for calculation of energy available at the periphery of NDMC. The Hon'ble Commission is requested to consider the energy balance as shown above for FY 2011-12 and accordingly approve the power purchase cost.

A T & C Losses

1.26 Energy sales of the FY 2007-08 to FY 2010-11 have been trued up by the Hon'ble Commission in the respective true up orders for the said financial year. In FY 2011-12,

¹ Source: Annual Report of NRLDC for FY 2011-12

² Source: Delhi SLDC



the actual T&D losses were 11.51% as against the approved loss level of 9.60%.The table below highlights the comparison of actual distribution losses of NDMC against that approved & reviewed by the Hon'ble Commission.

Table 7 : AT&C losses

Sr. No.	Particulars	Units	FY 2011-12	
			Approved	Actual
1	Energy Available at NDMC periphery	MU	1431.11	1,408.59
2	Energy sold by NDMC	MU	1293.72	1,246.54
4	Transmission and Distribution losses	%	9.60%	11.51%
3	Transmission and Distribution losses	MU	137.39	162.06
5	Revenue billed	Rs Crores	686.07	645.96
6	Revenue collected	Rs Crores	686.07	642.18
7	Collection efficiency	%	100%	99.4%
8	AT&C Losses	%	9.60%	12.02%

1.27 The Hon'ble Commission is requested to allow the actual AT&C losses of 12.02% for FY 2011-12 and accordingly approve the power purchase requirement.

Power Purchase Cost

1.28 NDMC purchased power from of Dadri TPS, BTPS and Pragati Station, Bawana TPP and other sources. Power purchase cost of the FY 2007-08 to FY 2010-11 have been trued up the Hon'ble Commission in the respective true up orders for the said financial year.

1.29 The total power purchase cost of NDMC for FY 2011-12 consists of power purchase cost from various sources and transmission charges payable to PGCIL/DTL/SLDC etc.A comparison of the approved, reviewed and the actual power purchase cost is shown below:



Table 8 : Power Purchase Cost

For FY 2011-12

Sr. No.	Description	Petitioner's Submission (in MU)	Total Cost (Rs Crores)	Per Unit Rate (Rs.)	Approved in the Order (in MU)	Total Cost (Rs Crores)	Per Unit Rate (Rs.)	Actuals (in MU)	Total Cost (Rs Crores)	Actual Per Unit Rate (Rs.)
1	Dadri TPS	803.33	256.43	3.19	830.5	259.69	3.13	736.22	569.22	4.08
2	Badarpur TPS	664.8	264.49	3.98	720.03	287.73	4.00	658.81		
3	Pragati Power I	615.6	155.46	2.53	585.51	173.48	2.96	642.90	213.35	3.24
4	PPCL-III	396.69	119.01	3.00	74.28	30.23	4.07	14.75		
5	IPGCL – GTS	-	-	-	4.38	1.85	4.22	5.07	2.42	4.78
6	IPGCL – Rajghat	-	-	-	1.98	0.95	4.80			
7	Others (Bilateral/exchange/others)	-	-	-	-	-	-	26.23	14.34	5.47
8	Gross Power Purchase Quantum	2480.42	795.39	3.21	2216.68	753.97	3.40	2,083.98	799.33	3.84
9	Inter State Transmission Charges				18.68				22.95	
10	Intra State Transmission Charges				118.76				91.79	

1.30 The variation in the approved and the actual power purchase expenses is on account of various reasons including, change in cost of power, change in quantum of power purchased, consequent changes in the transmission charges payable and the difference in the transmission charges considered by the Commission and the actual paid by NDMC.

Table 9 : Revenue from Sale of Surplus Power

Sr. No	Particular	Revenue (Rs. Crores)
1	Net Exchange/Bilateral	122.71
2	Net Intradiscom Sale	21.57
	Total	144.28

1.31 The Hon'ble Commission is requested to allow the Net power purchase cost (after adjustment of revenue from sale of surplus power) of Rs. 655.05 Crores for FY 2011-12.



Operation & Maintenance Expenses

1.32 Operations and Maintenance (O&M) Expenses of NDMC consists of the following cost elements:

- Employee Expenses
- Repairs and Maintenance Expenses
- Administrative and General Expenses

Employee Cost

1.33 Employee expenses comprise of salaries, dearness allowance, Leave Travel Assistance, Earned Leave Encashment, Other Allowances & Relief bonus and Honorarium/Overtime.

Repair & Maintenance Expenses

1.34 Repairs and Maintenance Expenses go towards day to day upkeep of distribution functions of NDMC and form an integral part of NDMC's efforts towards reliable and quality power supply to its consumers and reduction of losses in its system.

Administrative & General Expenses

1.35 Administrative and General expenses mainly comprise of rents, telephone and other communication expenses, professional charges, conveyance and travelling allowances, other debits.

Operation and maintenance expenses

1.36 Operation and maintenance expenses for the FY 2007-08 to FY 2010-11 have been trued up the Hon'ble Commission in the respective true up orders for the said financial year. NDMC has considered the O&M expenses for the FY 2011-12 same as that approved by the Hon'ble Commission in its tariff order.



Table 10 : Operation & Maintenance Expenses

		Rs. in Crores				
Sr. No	O & M expenses	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
1	O&M Expenses	77.77	82.52	139.58	116.64	126.64

Administrative Expenses and Civil Engineering Department Expenses

1.37 Regarding the allocation of Civil Engineering Department expenses to electricity supply business; the Commission in its tariff order for NDMC for FY 2005-06 dated 02/11/2005 mentioned the following:

“..... As the exact details of the cost of the works carried out by the Civil Engineering Department for Electricity Department are not available at this stage, the Commission, for the purpose of determination of ARR for FY 2005-06, has considered a Lump sum amount of Rs. 1000 Lakh on provisional basis towards this expenditure. The Commission will consider the actual cost of works carried out by Civil Engineering Department for electricity appropriately during the true up process at the end of the year.....”

Since NDMC is yet to segregate the expenses shared by its Civil Engineering Department on account of electricity distribution business, hence NDMC requests the Commission to consider the same amount of Rs. 10 Cr against this head.

1.38 Further to the above and in respect of allocation of the Administrative Department expenses, Commission in the same tariff order has mentioned the following:

“..... Thus, while 19% of total administrative department expenses have been considered to be allocated to electricity department, an amount”

1.39 Accordingly, NDMC has considered an allocation of 19% of the salary head of its Administrative department towards its electricity distribution business for FY 2011-12. The allocation of expenses against this head comes out to be Rs. 109.47 Crores. The Hon'ble Commission is requested to approve the actual Administrative Expenses and



Civil Engineering Department Expenses of Rs. 119.47 Crores for FY 2011-12 for the electricity business of NDMC.

Table 11 : Administrative and Civil Engineering Department Expenses

Rs In Crores

Sr. No.	Admin and civil engineering expenses	Submitted By NDMC	Approved by Commission	Actual for FY 2011-12
1	General Administration expenses as per NDMC Budget	-	-	576.14
2	Allocation of Admin related expenses to Electricity Supply Business of NDMC @19%	72.03	35.37	109.47
3	Cost of civil engineering department	10.00	10.00	10.00
4	Total allocation of Admin. and Civil Engineering Department to Electricity Distribution Business	82.03	45.37	119.47

Gross Fixed Assets

1.40 NDMC has considered the opening value of Gross Fixed assets (GFA), Capital work in progress (CWIP) for FY 2006-07 same as that approved by the Hon'ble Commission in its tariff order. Actual capital expenditure and capitalization has been considered to arrive at the Gross fixed assets of each year. Opening fixed assets, opening capital work in progress, capital expenditure in each year, closing capital work in progress and closing fixed assets for each year on actual basis has been given in the table below:



Table 12 : Gross Fixed Assets

		Rs. In Crores					
Sr. No	Particulars	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
1	Opening Gross Fixed Assets	327.57	343.14	406.50	561.62	763.38	927.47
2	Opening CWIP	19.98	22.56	40.80	114.32	87.44	76.65
3	Capital expenditure	18.15	81.60	228.64	174.88	153.30	149.08
4	Capitalisation	15.57	63.36	155.12	201.76	164.09	122.56
5	Closing CWIP	22.56	40.80	114.32	87.44	76.65	103.17
6	Closing Gross Fixed Assets	343.14	406.50	561.62	763.38	927.47	1,050.03

Depreciation

1.41 Depreciation is charged on the basis of straight-line method, on the average Gross Fixed Assets at the beginning and at the end of each year. The depreciation is based on the original cost, estimated life and residual life. Depreciation for the control period is determined by applying depreciation rate as approved by the Hon'ble Commission in its tariff order for the control period. As per the methodology adopted by the Hon'ble Commission, depreciation has been computed at 3.6 % of average GFA during the year. The Table below summarizes the depreciation claimed by NDMC.

Table 13 : Depreciation

		Rs. In Crores				
Sr. No	Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
1	Opening Balance of Fixed Assets	343.14	406.50	561.62	763.38	927.47
2	Addition during the year	63.36	155.12	201.76	164.09	122.56
3	Retirement during the year	-	-	-	-	-
4	Closing balance of fixed assets	406.50	561.62	763.38	927.47	1,050.03
5	Average fixed assets	374.82	484.06	662.50	845.43	988.75
6	Rate of Depreciation	3.60%	3.60%	3.60%	3.60%	3.60%
7	Depreciation	13.49	17.43	23.85	30.44	35.60
8	Accumulated Depreciation (closing)		270.17	294.02	324.46	360.05
9	Net Block		291.45	469.36	603.01	689.98



Working Capital

1.42 The Hon'ble Commission has specified the norms for determining working capital requirement for the Distribution Licensee in its MYT Regulation 2007 of the first control period. NDMC has calculated the same as per the norms specified in the MYT Regulations, 2007. For calculation of the working capital requirement actual net power purchase expenses for the one month, receivables for the two months and actual O&M expenses for one month of electricity business of NDMC has been considered. The norm used and calculation of working capital for each year of first control period is given below:

Description	Norms for calculation
Working capital for retail supply of electricity	WC = Receivables for two months of revenue from sale of electricity + Operation and maintenance expenses for one month - power purchase costs for one month.
Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2007.	

Table 14 : Working Capital

in Rs Crores

Sr. No.	Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
1	O&M Expenses	77.77	82.52	139.58	116.64	126.64
2	1/12th of Total O&M Expenses	6.48	6.88	11.63	9.72	10.55
3	Receivables	300.46	241.53	650.76	801.54	1,127.99
4	Receivables equivalent to 2 months average billing	50.08	40.25	108.46	133.59	188.00
5	Power Purchase expenses	175.55	39.84	314.62	507.26	655.05
6	Less: 1/12th of power purchase expenses	14.63	3.32	26.22	42.27	54.59
7	Less: Consumer Security Deposits	25.43	26.56	27.75	28.99	28.99
8	Total Working Capital	16.50	17.25	66.12	72.05	114.97



Return on Capital Employed (RCoE)

1.43 NDMC submits before the Hon'ble commission that capital expenditure incurred by it for creation of assets has been entirely incurred through its budgetary support and internal accruals. It has not used any type of loan for creation of assets. NDMC has considered normative debt – equity ratio of 70:30 for calculating RoCE. The Rate of Return on Equity for the first control period is kept at 16% as per the Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff Regulations, 2007 notified by DERC. Rate of Return on the Debt for first control period is kept at the same level as approved by the Commission in its MYT tariff order for the first control period. Detailed calculation of Regulated Rate Base, Change in Working Capital, Weighted average cost of capital (WACC) leading up to estimation of RoCE is shown in the table below:

Table 15 : Return on Capital Employed

Rs. In Crores							
Sr. No	Particulars	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12
1	Opening Balance of OCFA	343.14					
2	Opening Balance of Working Capital	8.18					
3	Opening Balance of Accumulated Depreciation	239.25					
4	RB (Opening)		112.07	170.25	308.70	535.48	675.06
5	Δ AB		49.87	137.69	177.91	133.65	86.97
6	Investments in the Year		63.36	155.12	201.76	164.09	122.56
7	Depreciation		13.49	17.43	23.85	30.44	35.60
8	Consumer Contribution		-	-	-	-	-
9	Change in WC		8.32	0.75	48.87	5.93	42.93
10	RB (Closing)	112.07	170.25	308.70	535.48	675.06	804.95
11	Regulated Rate Base (RRBi)		145.32	239.85	446.53	608.24	761.47
12	Equity		30%	30%	30%	30%	30%
13	Debt		70%	70%	70%	70%	70%
14	Rate of return on Equity		16.00%	16.00%	16.00%	16.00%	16.00%
15	Rate of Return on Debt		11.50%	11.50%	11.50%	11.50%	11.50%
16	WaCC		12.85%	12.85%	12.85%	12.85%	12.85%
17	Return on Capital Employed		18.67	30.82	57.38	78.16	97.85



Non-Tariff Income

1.44 Non-Tariff income of the FY 2007-08 to FY 2010-11 has been trued up the Hon'ble Commission in the respective true up orders for the said financial year. NDMC has considered the non-tariff income from the sale of electricity as per actuals for FY 2011-12. NDMC request the Hon'ble Commission to approve Non-Tariff Income of Rs. 21.35 Crores for FY 2011-12.

Table 16 : Non-Tariff Income for FY 2011-12

Rs in Crores

Sr. No.	Particulars FY 2011-12	As filed in petition	Approved in MYT order	Actuals
1	Meter Rent	1.53	1.53	0.00
2	MDI	0.94	0.94	11.09
3	Misuse	3.51	3.51	3.68
4	Burnt meter	0.04	0.04	0.03
5	Surcharge	0.45	0.45	0.98
6	New Connection/reconnection fee	0.29	0.29	0.27
7	Recovery of storage charges	0.91	0.91	-
8	Recovery of deposit work	0.56	0.56	4.06
10	Other Income from lapsed deposits	1.63	1.63	-
11	Other Receipts (petty items commercial)	0.27	0.27	1.23
	Total	10.13	10.13	21.35

Aggregate Revenue Requirement and Revenue from Sale of Power

1.45 Revenue from sale of power for the FY 2007-08 to FY 2010-11 have been trued up the Hon'ble Commission in the respective true up orders for the said financial year. Aggregate revenue Requirement for each year of the first control period, revenue from sale of power and surplus/gap for each year is given in the following sections.



Revenue Surplus/Gap for FY 2007-08

1.46 For the determination of Aggregate Revenue Requirement for the FY 2007-08, all components except RCoE and Depreciation are considered same as that approved by the Hon'ble Commission in its true order for FY 2007-08. Calculation of Depreciation, RCoE and working capital for FY 2007-08 are shown in table 13, table 14 and table 15. During FY 2007-08, NDMC's actual revenue from sale of electricity amounted to Rs 483.46 Crores which is same as that considered by the Hon'ble Commission in its true order for FY 2007-08. NDMC submits that the overall surplus based on the actual expenses and revenue during FY 2007-08 is Rs. 183 Crores. The same is provided in the table below:

Table 17: Revenue Gap for FY 2007-08

Rs in Crores

Sr. No.	Aggregate Revenue Requirement	Approved in Trued-up	Final True-up
1	Power Purchase Cost	175.55	175.55
2	Intra-State Transmission Charges (incl'd SLDC charges)	15.46	15.46
3	Operations & Maintenance Costs	77.77	77.77
4	Administrative & Civil Engineering Department Expenses allocated to electricity	45.37	45.37
5	RoCE including supply margin allowed	17.74	18.67
6	Depreciation	13.49	13.49
7	Less: Non Tariff Income	3.59	3.59
8	Less: Financial Impact on account of non-achievement of AT&C losses	20.38	20.38
9	Less: Surplus for FY 06-07 *	21.89	21.89
11	Aggregate Revenue Requirement	299.52	300.46
12	Revenue from sale of power	483.46	483.46
13	Revenue surplus/(Gap)	183.94	183.00



Revenue surplus/Gap for FY2008-09

1.47 For the determination of Aggregate Revenue Requirement for the FY 2008-09, all components except RCoE and Depreciation are considered same as that approved by the Hon'ble Commission in its true order for FY 2008-09. Calculation of Depreciation, RCoE and working capital for FY 2008-09 are shown in table 13, table 14 and table 15. During FY 2008-09, NDMC's actual revenue from sale of power amounted to Rs.519.57 Crores which is same as that considered by the Hon'ble Commission in its true order for FY 2008-09. NDMC submits that the overall surplus based on the actual expenses and revenue during FY 2008-09 is Rs. 278.14 Crores. The same is provided in the table below:

Table 18 : Revenue Gap for FY 2008-09

Rs in Crores

Sr. No.	Aggregate Revenue Requirement	Approved in Trued-up	Final True up
1	Net Power purchase cost	39.84	39.84
2	Inter-state Transmission Charges	33.79	33.79
3	O&M expenses	82.52	82.52
4	Administrative & Civil Engineering Department Expenses allocated to electricity	45.37	45.37
5	RoCE including supply margin allowed	29.79	30.82
6	Depreciation	17.43	17.43
7	Less: Non Tariff Income	8.24	8.24
8	Aggregate Revenue Requirement	240.50	241.53
9	Revenue from sale of power	519.67	519.67
10	Revenue surplus/(Gap)	279.17	278.14



Revenue Surplus/Gap for FY2009-10

1.48 For the determination of Aggregate Revenue Requirement for the FY 2009-10, all components except RCoE and Depreciation are considered same as that approved by the Hon'ble Commission in its true order for FY 2009-10. Calculation of Depreciation, RCoE and working capital for FY 2009-10 are shown in table 13, table 14 and table 15. During FY 2009-10, NDMC's actual revenue from sale of power amounted to Rs.519.76 Crores which is same as that considered by the Hon'ble Commission in its true order for FY 2009-10. NDMC submits that the overall gap based on the actual expenses and revenue during FY 2009-10 is Rs.131.00 Crores. The same is provided in the table below:



Table 19 : Revenue Gap for FY 2009-10

Rs in Crores

Sr. No.	Aggregate Revenue Requirement	Approved in Trued-up	Final True up
1	Net Power purchase cost	314.62	314.62
2	Transmission Charges	43.84	43.84
3	O&M expenses	139.58	139.58
4	Administrative & Civil Engineering Department Expenses allocated to electricity	45.37	45.37
5	RoCE including supply margin allowed	48.42	57.38
6	Depreciation	23.85	23.85
7	Less: Non Tariff Income	9.19	9.19
8	DTL Claim	35.31	35.31
9	Aggregate Revenue Requirement	641.70	650.76
10	Revenue from sale of power	519.76	519.76
11	Revenue surplus/(Gap)	(121.94)	(131.00)

Revenue Surplus/Gap for FY2010-11

1.49 For the determination of Aggregate Revenue Requirement for the FY 2010-11, all components except RCoE and Depreciation are considered same as that approved by the Hon'ble Commission in its true order for FY 2010-11. Calculation of Depreciation, RCoE and working capital for FY 2010-11 are shown in table 13, table 14 and table 15. During FY 2010-11, NDMC's actual revenue from sale of power amounted to Rs.598.64 Crores which is same as that considered by the Hon'ble Commission in its true order for FY 2010-11. NDMC submits that the overall gap based on the actual expenses and revenue during FY 2010-11 is Rs. 202.90 Crores. The same is provided in the table below:



Table 20 : Revenue Gap for FY 2010-11

Rs in Crores

Sr. No.	Aggregate Revenue Requirement	Approved in Trued-up	Final True up
1	Cost of Power Purchase	507.26	507.26
2	Transmission Charges	41.72	41.72
3	O&M expenses	116.64	116.64
4	Administrative & Civil Engineering Department Expenses allocated to electricity	45.37	45.37
5	RoCE including supply margin allowed	66.37	78.16
6	Depreciation	30.04	30.44
7	Less: Non Tariff Income	18.04	18.04
8	Aggregate Revenue Requirement	789.36	801.54
9	Revenue from sale of power	598.64	598.64
10	Revenue surplus/(Gap)	(190.72)	(202.90)

Revenue Surplus/Gap for FY2011-12

1.50 During FY 2011-12, Aggregate revenue requirement for the electricity business is Rs. 1145.07 Crores. NDMC's actual revenue from sale of power amounted to Rs 634.32 Crores. NDMC submits that the overall gap based on the actual expenses and revenue during FY 2011-12 is Rs. 485.81 Crores. The same is provided in the table below:



Table 21 : Revenue Gap for FY 2011-12

Rs in Crores

Sr. No.	Annual Revenue Requirement	As per tariff petition	Approved in MYT order	Actuals
1	Net Power Purchase Cost	477.90	493.21	655.05
2	Interstate Transmission Charges		18.68	22.95
3	Intrastate Transmission Charges		118.76	91.79
4	O&M expenses	190.49	126.64	126.64
5	Depreciation	33.87	34.63	35.60
6	ROCE	79.24	80.41	97.85
7	Administrative dept. & Civil Engineering d	82.03	45.37	119.47
8	Less: Non-Tariff Income	10.13	10.13	21.35
9	Total Costs	853.40	907.57	1,127.99
10	Employee Cost capitalized	-	10.01	-
11	Annual Revenue Requirement	853.40	897.56	1,127.99
12	Revenue from sale of power	608.68	686.07	642.18
13	Revenue surplus/(Gap)	(244.72)	(211.49)	(485.81)

1.51 NDMC requests the Hon'ble Commission to kindly consider its submissions and take a holistic view of its financial position and the resources required to improve its operational efficiencies.

Revenue Gap for the first control period along with Carrying cost

1.52 The Hon'ble Commission is requested to approve above mentioned Revenue surplus/gap for each year of the first control period and suggest the methodology for recovery of the same. NMDC has considered the carrying cost at rate of 9.5% per annum for the entire control period as approved by the Hon'ble Commission in its previous tariff orders. The Hon'ble Commission is requested to allow NDMC to recover Revenue Gap with its carrying cost at the rate of 9.5% per annum.



Table 22 : Revenue Gap for the first Control Period

Rs. in Crores

Sr. No	Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
1	Opening (Gap)/Surplus	21.89	238.59	552.62	467.89	299.80
2	Annual Revenue Requiremnt for the year	278.57	241.53	650.76	801.54	1,127.99
3	Revenue for the year	483.46	519.67	519.76	598.64	642.18
4	Surplus/(Gap) for the year	204.89	278.14	(131.00)	(202.90)	(485.81)
7	Closing Revenue (Gap)/ surplus	226.78	516.74	421.62	264.99	(186.01)
8	Carrying Cost (%age)	9.50%	9.50%	9.50%	9.50%	9.50%
9	Carrying Cost for the year	11.81	35.88	46.28	34.81	5.41
11	Closing Revenue (Gap)/ surplus	238.59	552.62	467.89	299.80	(180.60)
12	Ammortisation of Regulatory Asset	-	-	-	-	-
13	Net Revenue (Gap)/Surplus	238.59	552.62	467.89	299.80	(180.60)

1.53 The Hon'ble commission is requested to approved net gap of Rs 180.60 Crores including carrying cost for the First control period.



3. Aggregate Revenue Requirement for FY 2012-13 & FY 2013-14

Sales Projections for 2012-13 & FY 2013-14

1.54 The energy sales for the FY 2012-13 and FY 2013-14 are projected at a 5-year CAGR for different consumer categories. For the year 2012-13 and FY 2013-14 the energy sales in the licensed area has been projected at 1403.78 MUs and 1483.67 MUs respectively. In order to provide reliable and quality power to the key installations in the licensed area, the Petitioner requests the Commission to kindly approve the same. The estimated category wise sales for FY 2012-13 based on actual data of 9 Months and projected category wise sales FY 2013-14 are given in the table below:

Table 23 : Category wise Energy Sales

	FY 2007-08 (Actual)	FY 2008-09 (Actual)	FY 2009-10 (Actual)	FY 2010-11 (Actual)	FY 2011-12 (Actual)	FY 2012-13 (Apr - Dec)	FY 2012-13 (Estimated)	CAGR	FY 2013-14 (Projected)
Domestic	220	208.98	223.41	239.13	243.89	206.74	275.66		291.72
Single Delivery Point	70	69.21	74.76	84.02	86.46	73.29	97.72	7%	104.70
Separate Delivery Point up to 100 kW	129	120.53	129.54	136.10	141.63	120.06	160.08	6%	169.43
Domestic Power up to 100 kW	21	19.24	19.11	19.01	15.80	13.39	17.86	-1%	17.60
Non Domestic	246	250.81	249.63	250.84	247.70	208.30	277.73		284.25
Upto 5 kW	53	51.15	50.68	50.85	48.95	55.68	74.25	8%	79.99
More than 5 kW to less than 100 kW	193	199.66	198.95	199.98	198.75	152.61	203.48	0%	204.26
Mixed Load	605	589.11	652.46	693.57	713.78	597.95	797.27		849.53
Supply at 11 kV (HT)		387.33	439.23	483.06	510.99	436.90	582.53	9%	632.07
Supply on LT where supply is given from NDMC sub station		4.82	4.36	4.24	3.96	2.96	3.94	-4%	3.79
Supply on LT where applicant provides built up space for sub station	605	196.95	208.86	206.28	198.83	158.10	210.80	1%	213.68
Small Industry Power	0	0.27	0.35	0.32	0.31	0.24	0.32	4%	0.33
Public Lighting	8	8.73	9.19	8.37	12.95	6.08	8.10	-1%	7.98
Others	4	6.50	7.08	9.50	7.69	7.01	9.35	8%	10.05
DMRC	-	-	-	-	20.23	26.52	35.36		40.00
Total	1,083	1,064.40	1,142.12	1,201.73	1,246.54	1,052.84	1,403.78	6%	1,483.67



Power Purchase

- 1.55 NDMC has allocations of power from thermal power plants Dadri TPS, BTPS and Pragati Station. Power purchase of the FY 2012-13 to FY 2013-14 has been considered as approved by the Hon'ble commission in its MYT tariff order for the second control period.
- 1.56 The total power purchase cost of NDMC for FY 2012-13 to FY 2013-14 consists of power purchase cost from various sources and the transmission charges payable to PGCIL/DTL and other charges payable to /SLDC/RLDC.

Table 24 : Power Purchase Cost

Sr. no.	Source	FY 2012-13		FY 2013-14	
		MU	Rs Cr	MU	Rs Cr
1	Badarpur TPS	675.23	316.98	675.23	329.87
2	NCTPS Dadri	798.45	307.77	798.45	322.87
3	Rajghat Power House	2.11	1.05	2.11	1.09
4	Gas Turbine Power Station	4.99	2.05	4.99	2.14
5	PPCL-I	620.41	202.3	620.41	209.33
6	PPCL-III	326.13	146.76	722.97	325.34
7	Total Units	2427.33	976.92	2824.17	1190.65
8	Inter-State Transmission charges		21.04		22.10
9	Intra-state Transmission charges		74.03		62.66
10	SLDC Charges		5.87		6.16
11	Sale of surplus power		237.85		325.94
	Total		840.01		955.63

- 1.57 Transmission Charges payable to transmission charges payable to PGCIL/DTL and other charges payable to /SLDC/RLDC has been considered same as approved by the Hon'ble Commission in its MYT tariff order for the second control period.
- 1.58 Surplus power available for external sale is projected in the energy balance in table 4. Actual rate of sale of surplus power during FY 2011-12 is Rs 2.42 per unit. Considering the market to become more realistic in near future NDMC has considered



the sale of surplus power at the rate of Rs. 3 per unit based on the prevailing rate of sale of surplus energy. Accordingly revenue available from the sale of surplus power has been adjusted against the power purchase cost of NDMC.

1.59 The Hon'ble Commission is requested to allow the power purchase cost (including transmission charges) of Rs. 840.01 Crores & Rs. 955.63 Crores for FY 2012-13 & FY 2013-14.

Energy Requirement & Energy Balance

1.60 NDMC has considered the quantum of Power purchase from different sources, interstate and intrastate transmission losses for FY 2012-13 and FY 2013-14 same as that approved by the Hon'ble commission in its MYT order for second control period. The gross energy requirement for NDMC is as follows:

Table 25 : Energy Requirement & Energy Balance

in MUs

Sr. No	Description	FY 2012-13		FY 2013-14	
		Approved	Projected	Approved	Projected
1	Badarpur TPS	675.23	675.23	675.23	675.23
2	NCTPS Dadri	798.45	798.45	798.45	798.45
3	Rajghat Power House	2.11	2.11	2.11	2.11
4	Gas Turbine Power Station	4.99	4.99	4.99	4.99
5	PPCL-I	620.41	620.41	620.41	620.41
6	PPCL III	326.13	326.13	722.97	722.97
7	Gross Power Purchase	2,427.33	2,427.33	2,824.17	2,824.17
8	Inter-state transmission losses	39.92	39.92	54.01	54.01
9	Intra-state transmission losses	28.72	28.72	33.33	33.33
10	Power Available to NDMC	2,358.69	2,358.69	2,736.83	2,736.83
11	Sale of Retail Power	1,253.43	1,403.78	1,317.43	1,483.67
12	Distribution loss (%)	10.35%	10.35%	10.10%	10.10%
13	Distribution loss (MU)	144.71	162.07	148.01	166.69
14	Energy required for Retail Sale	1,398.14	1,565.85	1,465.44	1,650.36
15	Surplus power available for sale	960.55	792.84	1,271.39	1,086.47



1.61 The Hon'ble Commission is also requested to consider the energy balance as shown above for FY 2012-13 and FY 2013-14 and accordingly approve the power purchase cost.

A T & C Losses

1.62 NDMC has projected the transmission and distribution losses at the same level as approved by the Hon'ble commission in its tariff order for the second control period. NDMC has projected the collection efficiency at 99% as projected in its MYT tariff petition for the second control period. The table below highlights the comparison of AT&C losses of NDMC approved by the Hon'ble Commission and projected by the NDMC.

Table 26 : AT&C losses

Sr. No	Particulars	FY 2012-13		FY 2013-14	
		Approved	Projected	Approved	Projected
1	Distribution Loss Target	10.35%	10.35%	10.10%	10.10%
2	Collection Efficiency Target	100.00%	99.00%	100.00%	99.00%
3	AT&C Loss Target	10.35%	11.25%	10.10%	11.00%

1.63 The Hon'ble Commission is requested to allow the projected AT&C losses of 11.25% and 11% for FY 2012-13 and FY 2013-14 and accordingly approve the power purchase requirement and revenue from sale of energy.

Operation & Maintenance Expenses

1.64 Operations and Maintenance (O&M) Expenses of the company consists of the following cost elements:

- Employee Expenses
- Repairs and Maintenance Expenses
- Administrative and General Expenses



Employee Cost

1.65 Employee expenses comprise of salaries, dearness allowance, Leave Travel Assistance, Earned Leave Encashment, Other Allowances & Relief bonus and Honorarium/Overtime.

Repair & Maintenance Expenses

1.66 Repairs and Maintenance Expenses go towards day to day upkeep of distribution functions of NDMC and form an integral part of NDMC's efforts towards reliable and quality power supply to its consumers and reduction of losses in its system.

Administrative & General Expenses

1.67 Administrative and General expenses mainly comprise of rents, telephone and other communication expenses, professional charges, conveyance and travelling allowances, other debits.

Operation and Maintenance expenses

1.68 NDMC has projected the Operation and Maintenance expenses for the FY 2012-13 and FY 2013-14 same as that approved by the Hon'ble Commission in its tariff order for the second control period. NDMC requests the Hon'ble Commission to approve the O&M expenses of the NDMC as per actuals at the time of true up of these expenses.

Table 27 : Operation & Maintenance Expenses

Rs in Crores			
Sr. No.	Particular	FY 2012-13	FY 2013-14
1	Net O&M Expenses	141.96	151.14



Administrative Expenses and Civil Engineering Department Expenses

1.69 Regarding the allocation of Civil Engineering Department expenses to electricity supply business; the Commission in its tariff order for NDMC for FY 2005-06 dated 02/11/2005 mentioned the following:

“..... As the exact details of the cost of the works carried out by the Civil Engineering Department for Electricity Department are not available at this stage, the Commission, for the purpose of determination of ARR for FY 2005-06, has considered a Lump sum amount of Rs. 1000 Lakh on provisional basis towards this expenditure. The Commission will consider the actual cost of works carried out by Civil Engineering Department for electricity appropriately during the true up process at the end of the year.....”

Since NDMC is yet to segregate the expenses shared by its Civil Engineering Department on account of electricity distribution business, hence NDMC requests the Hon'ble Commission to consider the same amount of Rs. 10 Cr against this head for FY 2011-12 and for FY 2012-13 and FY 2013-14 with an escalation of 5% over the actuals of FY 2011-12.

1.70 Further to the above and in respect of allocation of the Administrative Department expenses, the Hon'ble Commission in the same tariff order has mentioned the following:

“..... Thus, while 19% of total administrative department expenses have been considered to be allocated to electricity department, an amount”

1.71 Accordingly, NDMC has considered an allocation of 19% of the salary head of its Administrative Department towards its electricity distribution business. For the projection of the Administrative Expenses and Civil Engineering Department Expenses for FY 2012-13 & FY 2013-14, an escalation of 5% has been considered over the actual Administrative Expenses for FY 2011-12. NDMC requests the Hon'ble Commission to approve Administrative Expenses and Civil Engineering Department



Expenses for FY 2012-13 and FY 2013-14 of Rs. 125.44 Crores and Rs 131.71 Crores respectively.

Table 28 : Admin. and Civil Engineering Department Expenses

Rs In Crores				
Sr. No.	Admin and civil engineering expenses	Actual for FY 2011-12	FY 2012-13	FY 2013-14
1	Allocation of Admin related expenses to Electricity Supply Business of NDMC @19%	109.47	114.94	120.69
2	Cost of civil engineering department	10.00	10.50	11.03
3	Total allocation of Admin. and Civil Engineering Department to Electricity Distribution Business	119.47	125.44	131.71

Gross Fixed Assets

1.72 NDMC has considered the closing value of Gross fixed assets of FY 2011-12 as per actuals for projecting the Gross fixed assets in FY 2012-13 and FY 2013-14. Capital expenditure and capitalization during FY 2012-13 and FY 2013-14 has been considered as that approved by Hon'ble Commission in its MYT tariff order for the second control period. Projected opening Gross fixed assets, opening capital work in progress, capital expenditure during the year, closing capital work in progress and closing fixed assets for each year has been given in the table below:



Table 29 : Gross Fixed Assets

Rs. In crores

Sr. No	Particulars	FY 2011-12	FY 2012-13	FY 2013-14
1	Opening Gross Fixed Assets	927.47	1,050.03	1,118.74
2	Opening CWIP	76.65	103.17	80.06
3	Capital expenditure	149.08	45.60	17.68
4	Capitalisation	122.56	68.71	31.64
5	Closing CWIP	103.17	80.06	66.10
6	Closing Gross Fixed Assets	1,050.03	1,118.74	1,150.38

Depreciation

1.73 Depreciation is charged on the basis of straight-line method, on the average Gross Fixed Assets based on Gross fixed assets at the beginning and at the end of the financial year. The depreciation is based on the original cost, estimated life and residual life. Depreciation for FY 2012-13 and FY 2013-14 is determined by applying depreciation rate as approved by the Hon'ble Commission in its tariff order for the second control period. As per the methodology adopted by the Hon'ble Commission, depreciation has been computed at 3.6 % of average GFA during the year. The Table below summarizes the depreciation claimed by NDMC.

Table 30 : Depreciation

Rs In Crores

Sr. No	Particulars	FY 2011-12	FY 2012-13	FY 2013-14
1	Opening Balance of Fixed Assets	927.47	1,050.03	1,118.74
2	Addition during the year	122.56	68.71	31.64
3	Retirement during the year	-	-	-
4	Closing balance of fixed assets	1,050.03	1,118.74	1,150.38
5	Average fixed assets	988.75	1,084.39	1,134.56
6	Rate of Depreciation	3.60%	3.60%	3.60%
7	Depreciation	35.60	39.04	40.84
8	Accumulated Depreciation (closing)	360.05	399.09	439.93
9	Net Block		719.65	710.45



Working Capital

1.74 The Hon'ble Commission has specified the norms for computing working capital requirement for the Distribution Licensee in its MYT Regulation, 2011 for the second control period. NDMC has calculated the same as per the norms specified in the DERC MYT Regulations, 2011. For calculation of the working capital receivables for two months, power purchase expenses for one month, transmission charges for one month and wheeling charges for two months as specified in DERC MYT regulation 2011 for the electricity business of NDMC has been considered. The norm used and calculation of working capital for each year of first control period is given below:

Table 31 : Norm for calculation of Working Capital

Description	Norms for calculation
Working capital for retail supply of electricity	WC = Receivables for two months of revenue from sale of electricity - power purchase costs for one month - Transmission charges for one month - wheeling expenses for two months
Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011	

Table 32 : Working Capital

		Rs. In Crores	
Sr. No.	Particulars	FY 2012-13	FY 2013-14
1	Receivables	1,234.12	1,368.95
2	Receivables equivalent to 2 months average billing	205.69	228.16
3	Power Purchase expenses	739.07	864.71
4	Less: 1/12th of power purchase expenses	61.59	72.06
5	Transmission Expense	95.07	84.76
6	Less: 1/12th of Transmission Expense	7.92	7.06
7	Wheeling Expense	-	-
8	Less: wheeling expense for 2 months	-	-
9	Total Working Capital - Retail Supply	136.18	149.04



Return on Capital Employed

1.75 NDMC has adopted of the Rate of Return on Equity for the FY 2012-13 and FY 2013-14 at 16% as per the Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff Regulations, 2007 notified by DERC. Interest rate on the Debt has been considered at 11.5% which is same as approved by the Hon'ble Commission in its order. Detailed calculation of Regulated Rate Base, Change in Working Capital, Weighted average cost of capital (WACC) leading up to estimation of RoCE is shown in the table below.

Table 33 : Return on Capital Employed

Rs in Crores				
Sr. No	Particulars	FY 2011-12	FY 2012-13	FY 2013-14
1	Opening Balance of OCFA	1,050.03		
2	Working Capital	114.97		
3	Accumulated Depreciation	360.05		
4	RB (Opening)		804.95	855.83
5	Δ AB		29.67	(9.20)
6	Investments in the Year		68.71	31.64
7	Depreciation		39.04	40.84
8	Consumer Contribution		-	-
9	Change in WC		21.20	12.86
10	RB (Closing)	804.95	855.83	859.48
11	Regulated Rate Base (RRBi)		840.99	864.09
12	Equity		30%	30%
13	Debt		70%	70%
14	Rate of return on Equity		16.00%	16.00%
15	Rate of Return on Debt		11.50%	11.50%
16	WACC		12.85%	12.85%
17	Return on Capital Employed		108.07	111.04

Non-Tariff Income

1.76 Non-Tariff income for the FY 2012-13 and FY 2013-14 has been projected same as that approved by the Hon'ble Commission in its MYT tariff order in July 2012 for the



second control period. NDMC request the Hon'ble Commission to approve Non-Tariff Income of Rs. 20.39 and Rs. 21.41 Crores for FY 2012-13 and FY 2013-14 respectively.

Table 34 : Non-Tariff Income

Rs. In Crores			
Sr. No.	Particular	FY 2012-13	FY 2013-14
1	Non Tariff Income	20.39	21.41

Aggregate Revenue Requirement

1.77 Based on the projection of various heads as discussed earlier the Aggregate revenue Requirement for FY 2012-13 and FY 2013-14 is given in the table below:

Table 35 : Aggregate Revenue Requirement

Rs. In Crores					
Sr. No.	Particulars	FY 2012-13		FY 2013-14	
		Approved	Revised	Approved	Projected
1	Cost of power purchase, including T&D losses	573.16	739.07	658.28	864.71
2	Inter-State Transmission charges	21.04	21.04	22.10	22.10
3	Intra-state Transmission charges	74.03	74.03	62.66	62.66
4	SLDC Charges	5.87	5.87	6.16	6.16
5	Net Operation & Maintenance	141.96	141.96	151.14	151.14
6	Depreciation	37.89	39.04	39.70	40.84
7	Administrative Dept. & Civil Engg. Dept	45.37	125.44	45.37	131.71
8	RoCE	89.72	108.07	91.99	111.04
9	Less: Non Tariff Income	20.39	20.39	21.41	21.41
10	Aggregate Revenue Requirement	968.65	1,234.12	1,055.99	1,368.95

1.78 NDMC requests the Hon'ble Commission to kindly consider its submissions and take a holistic view of its financial position and the resources required to improve its operational efficiencies.

Revenue from Sale of Power



1.79 The revenue for FY2012-13 and FY2014 has been projected at current tariff with proportionate changes in revenue projected the by Hon'ble Commission in its MYT tariff order for the second period for revised sales projected in this petition for these years. Revenue from sale of power for the FY 2012-13 & FY 2013-14 is as given in the table below:

Table 36 : Revenue from Sale of Power

Sr. No	Category	Rs In Crores	
		FY 2012-13 (Projected)	FY 2013-14 (Projected)
1	Domestic	117.93	122.72
2	Non Domestic	219.03	223.55
3	Mixed Load	569.65	604.61
4	Small Industry Power	0.18	0.19
5	Public Lighting	5.55	5.47
6	Others	5.19	5.58
7	DMRC	18.31	20.55
8	Total	935.84	982.66

Revenue Gap

1.80 During FY 2012-13 and FY 2013-14, NDMC's projected revenue from sale of power amounted to Rs 935.84 Crores and Rs 982.66. NDMC submits that the overall gap based on the projected expenses and revenue during FY 2012-13 and FY 2013-14 is Rs. 310.89 Crores and Rs. 314.85 Crores respectively. The same is provided in the table below.



Table 37 : Revenue Gap

Sr. No.	Particulars	FY 2012-13		FY 2013-14	
		Approved	Revised	Approved	Projected
1	Aggregate Revenue Requirement	968.65	1,234.12	1,055.99	1,368.95
2	Revenue from sale of power	847.20	935.84		982.66
3	Revenue Gap	(121.45)	(298.28)		(386.29)

Tariff Revision Proposal

- 1.81 There is a net gap of Rs 180.60 Crores including the carrying cost for the First control period as calculated in table 22.
- 1.82 NDMC proposes a 20% hike in tariff across consumer categories to meet the projected revenue gap at the end of the First Control Period.



4. Response to Directives issued by the Hon'ble Commission

1.83 It is submitted that the NDMC has made concerted efforts to comply with the various directives given by the Hon'ble Commission in the tariff orders. The status of compliance against each of the directives is provided in this chapter.

Table 38: Compliance of Directives

Sr. No.	Directive issued by Hon'ble Commission	NDMC's Submission
1	Distribution licensee is directed to post the monthly distribution transformer losses and zone/district wise AT&C loss data giving break-up of energy input, energy billed and revenue realization on its website within 3 weeks from the end of the month.	NDMC area as a whole is treated as one district. The figures will be provided/ up-loaded on NDMC web-site from time to time after the approval of Hon'ble Commission.
2	Distribution licensee is directed to reduce AT&C losses by at least 10% in respect of those zones/districts which are currently having losses in excess of 30% within one year i.e. by August, 2013. These targets shall have to be met by distribution licensee irrespective of the overall AT&C loss achievement targets specified in this Order. Failure to do so will invite penalties.	NDMC submit before the Hon'ble Commission that all zones/districts falling under distribution area of NDMC are having AT&C losses less than 30%.
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.	NDMC submits before Hon'ble Commission that all data required for True-up (including kWh & kVAh for the consumers billed on kVAh basis) has been maintained & will not be deleted from the data base prior to issuance of Order for True-up for that period by the Commission.
4	The Commission directs the distribution licensee to get the Form 2.1(a) audited by the Statutory auditors on a quarterly basis. The auditor certificate in this regard shall be filed in the Commission within 30 days from the end of the quarter.	The requisite information in Form 2.1 (a) is being provided to the Commission. NDMC is getting Form 2.1(a) audited by the Statutory auditors.
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.	The requisite information is ready and is being provided to the Commission along with ARR petition. Initial action for including the information in the Accounts is being taken up by the Finance Department.



Sr. No.	Directive issued by Hon'ble Commission	NDMC's Submission
6	Distribution licensee shall be responsible for making timely payment of bills/dues to central & state generating stations and transmission utilities. The Commission shall not allow surcharge as a pass through in the ARR, if paid by the distribution licensee, on account of delayed payments.	NDMC is making timely payment of bills/dues to central & state generating stations and transmission utilities.
7	Distribution licensee shall prepare the "Asset Register" and submit to the Commission by October 31, 2012.	Asset Registers are already being maintained by NDMC
8	Distribution licensee is directed to meter electricity consumption in its offices, grid substations, consumer care centres, etc. within 2 months from the date of issue of this order	In NDMC area electric supply is already metered for all the offices /grid substations, consumer centers etc.
9	The Commission directs the distribution licensee to conduct a safety audit and carry out preventive maintenance as per schedule	Safety aspects are regularly attended by the concerned Maintenance Divisions of the electricity department. NDMC is also carrying out preventive maintenance as per schedule
10	With respect to AT&C losses, the Commission directs the Petitioner for the following:	
(i)	Submit Form 2.1(a) on monthly basis along with billing database to the Commission within 3 weeks of the following month.	NDMC is submitting Form 2.1(a) on monthly basis along with billing database to the Hon'ble Commission.
(ii)	Submit category wise revenue collection on monthly basis along with the supporting documents within 3 weeks of the following month.	New software developed by Vyom technology got implemented September 2012. After completion of all the bill groups implemented through Vyom technology limited category wise revenue collection report will be submitted from May 2013 to Hon'ble Commission.
(iii)	In respect of the directive to include Form 2.1(a) in the quarterly and annual balance sheet, the Commission has decided to accept Auditor's Certificate in respect of quarterly information. Further, the information may be included as a part of Regulatory accounts annually.	Initial action for including the information in the Accounts is being taken up by the Finance Department.
(iv)	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.	Initial action for including the information in the quarterly and annual Balance sheet is being taken up by the Finance Department.
(v)	Include source wise power purchase and sale details i.e. quantum in MU and Rs Cr in the quarterly and annual balance sheet.	Initial action for including the information in the quarterly and annual balance sheet is being taken up by the Finance Department.



Sr. No.	Directive issued by Hon'ble Commission	NMDC's Submission
(vi)	Submit monthly report to the Commission giving details of category wise consumer addition and their detail within 3 weeks of the following month.	NMDC is Submitting monthly report giving details of category wise consumer addition and their detail to the Hon'ble Commission.
(viii)	Submit monthly report to the Commission giving details of no. of connection disconnected / reconnected and their detail within 3 weeks of the following month.	NMDC is Submitting monthly report giving details of category wise consumer addition and their detail to the Hon'ble Commission.
(ix)	Submit monthly report to the Commission on change of consumer category for consumer within 3 weeks of the following month.	NMDC is Submitting monthly report to the Commission on change of consumer category for consumer to Hon'ble Commission.
(x)	Submit monthly report to the Commission on bill correction / JE entries within 3 weeks of the following month.	NMDC is Submitting monthly report on bill correction / JE entries to Hon'ble Commission.
11	The Commission directs that whenever journal entries are to be made for bill correction, they shall indicate both the amount reversed as well as the units reversed. The Petitioner shall submit monthly report to the Commission on bill correction / JE entries within 3 weeks of the following month.	NMDC is submitting monthly report on bill correction / JE entries to Hon'ble Commission
12	The Commission directs that 100% metering shall be done for street lighting. Energy consumption on account of ballast etc. shall be accounted through metered consumption.	In NMDC power distribution area 100% metering has been done for street lighting.
13	All effort shall be made for prudence in short term sale and purchase so as optimize power purchase cost for which detailed directions will be issued by the Commission separately.	NMDC is making every effort to optimize power purchase cost in short term sale and purchase. All cases pertaining to trading of power are approved by DPPG in their meetings and minutes of the meeting are also being sent to DERC.
14	The Commission directs that provisions made on account of power sale and purchase at the end of year i.e. in March shall be adjusted within one month, i.e. in the month of April. Remaining provisions if any shall be considered by the Commission for next year True-up.	NMDC is complying the directive given by Hon'ble Commission
15	The Commission directs the distribution licensee to submit information regarding capitalization of consumer contribution for the period from FY 2007-08 till date.	NMDC have not received any consumer contribution for the period from FY 2007-08 till date.



Sr. No.	Directive issued by Hon'ble Commission	NDMC's Submission
16	The Commission directs the distribution licensee to separately book the cost of works carried out by civil engineering department for electricity department and provide complete details of such works and associated costs at the end of the year bringing out clearly the percentage expenditure of Civil Engineering Department booked to electricity department vis-à-vis all other departments.	Work of separating the cost of works carried out by civil engineering department for electricity department is in progress.