

INTRODUCTION

- 1.1 The Distribution licensee, North Delhi Municipal Corporation (NDMC) have filed petition for true up for the FY 2009-10 and Aggregate Revenue Requirements (ARR) for the FY 2011-12.
- 1.2 This staff paper contains summary of the petition filed by NDMC for true up of FY 2009-10 (based on audited accounts) and ARR & Tariff of FY 2011-12 (projections). For the purpose of comparison of trends, the document also contains the figures for true up of FY 2007-08 and revised ARR of FY 2009-10 as approved by the Commission in the tariff order of FY 2009-10 and figures for FY 2008-09 and FY 2010-11 as approved by the Commission in the MYT Order.
- 1.3 As per the MYT Regulations, Tariff for the year 2011-12 shall be based on the ARR approved by the Commission, which broadly has the following components:
 - a) Power Purchase cost
 - b) Operation and Maintenance (O&M) expenses
 - Employee expenses
 - Administrative & General expenses
 - Repair & Maintenance expenses
 - c) Return on capital employed
 - d) Depreciation
 - e) Income tax
- 1.4 The Commission shall also true up the uncontrollable parameters (Sales and Power Purchase) viz-a-viz the audited account of distribution licensees after prudence check for the year 2009-10.
- 1.5 In so far as the controllable parameters for the FY 2009-10 are concerned, any variation (up or down) on account of O&M expenses is completely to the account of the licensee and is not trued-up (excluding impact of Sixth pay Commission). Depreciation and ROCE shall be trued-up at the end of the control period based on the capital expenditure and capitalization undertaken by the licensees for each year of the control period viz-a-viz approved capital expenditure and capitalization by the Commission in the MYT order. Income Tax shall be considered at actual in accordance with the Regulations.

Energy Sales

- 1.6 In its petition, NDMC has submitted that its actual energy sales in FY 2009-10 were 1142.12 MU compared to energy sales of 1119.87 MU approved by the Commission in its Tariff Order for FY 2009-10 issued in June 2009. NDMC in its tariff petition has revised the estimates of energy sales as 1171.96 MU in FY 2010-11 and projected the same at 1220.67 MU in FY 2011-12.

- 1.7 Since sales is treated as an uncontrollable factor, NDMC has requested the Commission to approve the revised estimates for FY 2010-11 and true-up for FY 2009-10 based on audited accounts..

Table 1: Projection for Energy Sales

S N	Consumer Category (MUs)	2007-08	2008-09		2009-10		2010-11		2011-12
		Actual Sales Trued Up by Commission	Approved in the MYT order	Actual Sales as per True Up petition	Approved in the June 2009 order	Actual Sales as per True Up petition	Approved in the MYT Order	Revised estimates as per petition	Estimates as per petition
1	Domestic	220	215.59	208.98	219.54	223.41	223.56	243.38	255.15
	- Single delivery point		63.31		64.47	74.76	65.65	81.17	88.40
	- Separate delivery point		129.87		132.25	129.54	134.67	142.20	146.74
	Domestic Power		22.41		22.82	19.11	23.24	20.02	20.02
2	Non Domestic	246	257.86	250.81	268.04	249.63	278.62	255.25	267.81
	- Single phase		60.39		62.77	50.68	65.25	52.69	53.03
	- Three phase		197.47		205.27	198.95	213.37	202.56	214.78
3	Mixed Load	605	596.97	589.10	619.49	652.45	642.86	655.87	678.14
	- Supply on 11 KV (HT)		374.43		388.55	439.23	403.21	445.22	466.30
	- LT (400V) where supply is given from NDMC sub-station		7.38		7.66	4.36	7.95	4.45	4.45
	- Where the applicant provides built up space for sub-station		215.17		223.28	208.86	231.70	206.20	207.40
4	Small Industrial Power	0.32	0.35	0.27	0.35	0.35	0.36	0.41	0.45
5	Public Lighting	7.63	8.23	8.73	8.36	9.19	8.49	9.49	10.10
6	Others	4.08	3.99	6.50	4.09	7.08	4.20	7.55	9.01
7	DMRC	-	-	-	-	-	68.00	-	-
	Grand Total	1083	1082.98	1064.40	1119.87	1142.12	1226.08	1171.96	1220.67

AT&C Losses

- 1.8 In its petition, NDMC has projected the distribution loss level of 10.00% during FY 2011-12 and collection efficiency of 99%, which corresponds to AT&C losses of 10.90%. For FY 2010-11, NDMC has estimated a distribution loss level of 10.25% and AT&C loss level of 11.15% at 99% collection efficiency.

1.9 The table below shows the actual figures in FY 2009-10, along with what was approved in the MYT Order. The table also shows projections for FY 2010-11 and FY 2011-12 made by NDMC in respect of its distribution losses, collection efficiency and AT&C losses.

Table 2 Actual vs. Approved figures for 2009-10 and projections for 2010-11 and 2011-12

Particulars	2007-08	2008-09		2009-10		2010-11		2011-12
	Actual Trued Up by Commission	Approved in the MYT order	Actual as per True Up petition	Approved in the June 2009 order	Actual as per True Up petition	Approved in the MYT Order	Revised estimates as per petition	Estimates as per petition
Distribution Loss (%)	12.25%	10.75%	10.35%	10.38%	10.71%	10.00%	10.25%	10.00%
Collection Efficiency (%)	97.11%	100%	97.01%	100.00%	98.04%	100.00%	99.00%	99.00%
AT&C Loss (%)	14.79%	10.75%	13.03%	10.38%	12.46%	10.00%	11.15%	10.90%

Power Purchase Requirement

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

1.11 The energy sales for that year is grossed up by the loss levels for the year, to give the required quantum of power purchase for that year in the following manner:

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

1.12 The table below shows the actual sales, loss levels and power purchase for FY 2009-10 by the Licensee, and gives the projections for FY 2010-11 and FY 2011-12.

Table 3 Actual Sales, Loss & Power Purchase

Category	Unit	2007-08	2008-09		2009-10		2010-11		2011-12
		Actual Trued Up by Commission	Approved in the MYT order	Actual as per True Up petition	Approved in the June 2009 order	Actual as per True Up petition	Approved in the MYT Order	Revised estimates as per petition	Estimates as per petition
Sales	MU	1083.14	1082.98	1064.40	1119.87	1142.12	1226.08	1171.96	1220.67
Distribution Loss	%	12.25%	10.75%	10.35%	10.38%	10.71%	10.00%	10.25%	10.00%
Power Purchase at Periphery	MU	1234.40	1213.42	1187.28	1249.51	1279.06	1362.32	1305.80	1356.30

Power Purchase Cost

- 1.13 As per the MYT Regulations, 2007, the Licensee is allowed to recover the cost of power procurement from sources approved by the Commission for supply to its consumers. The following power procurement sources are approved by the Commission:
- (a) Intra-state and Inter-state Trading Licensees
 - (b) Bilateral Purchases
 - (c) Bulk Suppliers
 - (d) State generators
 - (e) Independent Power Producers
 - (f) Central generating stations
 - (g) Non-conventional energy generators
 - (h) Any generation business of the Distribution Licensee
- 1.14 NDMC in its petition has submitted that its power purchase requirement is met from under-mentioned sources:
- (a) Dadri TPS.
 - (b) Plants located in Delhi
 - (c) Bilateral power purchase
 - (d) Inter-Discom purchase
- 1.15 NDMC has submitted in its petition that the per unit cost of power purchase from power plants located in Dadri and Delhi is estimated on the basis of following assumptions:
- (a) The per unit cost of power purchase for FY 2010-11 are based on actual power purchase bills received by the licensee during the first six months of FY 2010-11. The projection for remaining six months has been done on the actual cost for the first six months of FY 2010-11.
 - (b) Power purchase cost for FY 2011-12 has been kept at same level as FY 2010-11.
 - (c) Power purchase cost of PPCL – III has been assumed at Rs. 3.00/ Unit.
- 1.16 The per unit cost of purchase and sale from the Bilateral and Inter Discom energy transactions for FY 2010-11 and FY 2011-12 is estimated by NDMC on the basis of following assumptions:
- (a) The per unit cost of power purchase and sale for FY 2010-11 are based on actual power purchase bills received by the NDMC during the first six months of FY 10-11. The projection for remaining six months has been done on the actual cost for six months of FY 2010-11.

- (b) The cost of energy sales under bilateral/inter-Discom arrangement during FY 2011-12 has been estimated on the basis of average per unit cost realized by NDMC during April 2009 to Sep 2010 from the sale of surplus power.
- 1.17 PPCL-III is expected to commence its generation from 1.09.2011 onwards and its availability is calculated accordingly by NDMC by taking into consideration its capacity, PLF of 80% and share of NDMC.
- 1.18 NDMC has projected the transmission charges payable to PGCIL and DTL on the basis of total capacity allocation in the transmission network. Licensee has estimated the transmission charges for FY 2010-11 based on the actual transmission charges for the first six months of FY 2010-11
- 1.19 For projecting the PGCIL and DTL transmission charges for FY 2011-12, NDMC has considered an escalation factor of 10% over the estimated FY 2010-11 transmission charges.
- 1.20 Inter-state transmission losses (PGCIL losses) are projected to be 4% while intra-state transmission losses (DTL losses) are projected to be 1.5% during FY 2011-12. The Commission in its previous MYT order has approved the inter-state and intra-state transmission losses of 3.5% and 0.95% respectively for the entire control period.
- 1.21 The tables below show the power purchase quantum and rate for for FY 2007-08, FY 2008-09, FY 2009-10 (actuals), FY 2010-11 and FY 2011-12 (projected).

Table 4 Power purchase quantum and rate of purchase for 2007-08 and 2008-09

Particulars	2007-08			2008-09					
	Actual Trued up by the Commission			Approved in the MYT Order			Actuals as per True-up Petition		
	MUs	Rs. Crs	Rs./Unit	MUs	Rs. Crs	Rs./Unit	MUs	Rs. Crs	Rs./Unit
Power purchase from Dadri and Plants located in Delhi									
Dadri TPS				813.49	190.02	2.34			
Badarpur TPS				696.99	202.17	2.90			
Pragati Power Station				577.81	117.74	2.04			
IPGCL									
PPCL-III									
Sub-Total (A)		681.48		2088.29	509.93	2.44	2192.60	638.77	2.91
Other Purchases									
Bilateral Purchase									
Inter Discom Purchase									
Sub Total (B)	-	-	-	-	-	-			
Transmission Charges (C)		15.46			21.52			33.79	
Total Power Purchase Cost (A +B +C)	2321.88	696.94	3.00	2088.29	531.45	2.54	2192.60	672.56	3.07
Sale									
Bilateral Sale		64.31							
Inter Discom Sale		85.07					503.15	598.93	6.28
Net UI		356.55					449.70		
Sub Total	1087.48	505.93	4.65	826.55	278.96	3.37	952.85	598.93	6.28
Losses				48.31			52.44		
Net Purchase Cost	1234.40	191.01	1.55*	1213.43	252.48	2.08*	1187.31	73.63	0.62

*includes transmission charges

Table 5 Power purchase quantum and rate of purchase for 2009-10, 2010-11 and 2011-12

Particulars	2009-10						2010-11						2011-12		
	Approved in June 2009 Order			Actuals as per True Up Petition			Approved in the MYT Order			Revised Estimates as per petition			Estimates as per petition		
	MUs	Rs. Crs	Rs./Unit	MUs	Rs. Crs	Rs./Unit	MUs	Rs. Crs	Rs./Unit	MUs	Rs. Crs	Rs./Unit	MUs	Rs. Crs	Rs./Unit
Power purchase from Dadri and Plants located in Delhi															
Dadri TPS	813.49	198.31	2.44	873.53	249.23	2.85	813.49	198.89	2.44	748.88	239.05	3.19	803.33	256.43	3.19
Badarpur TPS	696.99	213.20	3.06	715.73	228.43	3.19	696.99	211.77	3.04	594.57	236.55	3.98	664.8	264.49	3.98
Pragati Power Station	577.81	124.00	2.15	602.66	117.52	1.95	577.81	119.52	2.07	615.6	155.46	2.53	615.6	155.46	2.53
IPGCL				3.9	1.23	3.15				3.9	1.49	3.82	0	0	0
PPCL-III													396.69	119.01	3
Sub-Total (A)	2088.29	535.51	2.56	2195.82	596.41	2.72	2088.29	530.18	2.54	1962.96	632.55	3.22	2480.43	795.39	3.21
Other Purchases															
Bilateral Purchase	-	-	-	6.11	3.99	6.53	-	-	-	41.27	25.15	6.09	-	-	-
Inter Discom Purchase	-	-	-	0.53	0.28	5.3	-	-	-	0.53	0.21	3.96	-	-	-
Sub Total (B)	-	-	-	6.64	4.27	6.43	-	-	-	41.8	25.36	6.07	-	-	-
Transmission Charges (C)		28.16			43.84			30.84			47.3			52.03	
Total Power Purchase Cost (A +B +C)	2088.29	563.67	2.70	2202.46	644.52	2.93	2088.29	561.02	2.69	2004.76	705.21	3.52	2480.43	847.42	3.42
Sale															
Bilateral Sale	390	214.25		34.51	21.73	6.3				179.33	67.19	3.75	739.05	258.67	3.5
Inter Discom Sale	390	116.86		359.53	105.25	2.93				418.43	156.78	3.75	316.74	110.86	3.5
Net UI				474.7	159.08	3.35				50	13.5	2.7			
Sub Total	779.09	331.11	4.25	868.74	286.06	3.29	677.66	228.71	3.38	647.76	237.48	3.67	1055.78	369.52	3.5
Losses	59.36			54.66			48.31			51.19			68.35		
Net Purchase Cost	1249.51	232.56	1.86*	1279.06	358.46	2.8*	1362.32	332.31	2.44*	1305.8	467.74	3.58*	1356.3	477.90	3.52*

*Includes Transmission Charges

O&M Expenditure

- 1.22 The Commission has approved the O&M expense for NDMC for year FY 2007-08, FY 2008-09, FY 2009-10 and FY 2010-11 in its MYT order as shown in the table below. In accordance with MYT Regulations, O&M expense is a controllable element and any losses / gains on O&M expenses will be to the account of the utility.

Table 6 Proposed and approved O&M expenses

O&M Expenses (Rs. Cr)	2007-08	2008-09		2009-10		2010-11		2011-12
	Actual Trued Up by Commission	Approved in the MYT order	Actual as per True Up petition	Approved in the June 2009 order	Actual as per True Up petition	Approved in the MYT Order	Revised estimates as per petition	Estimates as per petition
Total O&M expenses	77.77	102.61	98.93	100.87	145.49	113.71	191.45	190.49
Efficiency Improvement	-	2%	-	3%	-	4%	-	-
Net O&M expenses	77.77	100.55	98.93	97.85	145.49	109.17	191.45	190.49

- 1.23 The following section details the approach and methodology adopted by the licensee to estimate its O&M expenditure for the years under consideration.

Employee Cost

- 1.24 NDMC has considered the actual eleven months (April- Feb) employee expenses for FY 2010-11 for forecasting the employee expenses for FY 2010-11. Actual employee cost for first eleven months amounts to Rs. 109.00 Cr, which includes Rs. 23.06 Crs paid towards arrears for 6th Pay Commission/DTL scales. Total employee cost of the NDMC is estimated to be Rs. 118.91 Cr for FY 2010-11.
- 1.25 For FY 11-12, NDMC has made a provision of Rs. 10.00 Cr towards payment of arrears due to implementation of the 6th Pay Commission. NDMC has followed the methodology recommended by the Hon'ble Commission in the order issued dated 7th March, 2008 to compute the employee costs for the FY 2011-12. The formula used to determine the employee and A&G expenses for the current MYT Control Period is presented below:

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

- 1.26 The escalation factor for the nth is computed by using the following combination of Consumer Price Index (CPI) and Wholesale Price Index (WPI).

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

- 1.27 NDMC has considered the CPI (overall) for Industrial Workers published by the Labour Bureau and the WPI component is linked to A&G costs and hence has been taken from the WPI (overall) published by the Central Statistical Organization, as tabulated hereunder:

Table 7: Actual WPI & CPI

Year	CPI	% of YoY growth	WPI (Overall)	%Growth YoY
2000-01	444		155.7	
2001-02	463	4.28%	161.3	3.60%
2002-03	482	4.10%	166.8	3.41%
2003-04	500	3.73%	175.9	5.46%
2004-05	520	4.00%	187.3	6.48%
2005-06	542	4.23%	195.5	4.38%
2006-07	580	7.01%	206.2	5.47%
2007-08	615	6.03%	215.8	4.66%
2008-09	671	9.11%	233.9	8.39%

- 1.28 NDMC further stated that since the current series of CPI for Industrial Workers with 2001 base was introduced w.e.f. January'06 Index and the earlier series with base year of 1982 was simultaneously discontinued, CPI and WPI index from the FY 2009-10 to FY 2011-12 are calculated on the moving average of the preceding five years, as tabulated hereunder:

Table 8: Projection of WPI & CPI

Year	CPI	% of YoY growth	WPI (Overall)	%Growth YoY
2009-10	712	6.08%	248	5.88%
2010-11	758	6.49%	262	5.75%
2011-12	811	6.94%	278	6.03%

- 1.29 The escalation factor for the FY 2011-12 computed by following the aforesaid methodology is presented in the table below:

Table 9: Projection for Escalation factor for FY 2011-12

Year	CPI	WPI	Escalation factor
2011-12	446	125	1.067

- 1.30 Total projected employee expenses as calculated by NDMC for FY 2010-11 and FY 2011-12 are tabulated hereunder:

Table 10: Employee Cost (Rs. Cr)

Particulars	2007-08	2008-09		2009-10		2010-11		2011-12
	Actual Trued Up by Commission	Approved in the MYT order	Actual as per True Up petition	Approved in the June 2009 order	Actual as per True Up petition	Approved in the MYT Order	Revised estimates as per petition	Estimates as per petition
Salaries					38.03		50.38	53.77
Additional pay/DA					8.02		10.62	11.33
Other Allowances and Relief					24.04		31.84	33.99

Particulars	2007-08	2008-09		2009-10		2010-11		2011-12
	Actual Trued Up by Commission	Approved in the MYT order	Actual as per True Up petition	Approved in the June 2009 order	Actual as per True Up petition	Approved in the MYT Order	Revised estimates as per petition	Estimates as per petition
Honorarium/Overtime					0.36		0.48	0.51
Bonus/ ex-gratia					0.23		0.30	0.32
Leave Travel Assistance					0.10		0.14	0.15
Arrears due to the 6th Pay Commission					14.29		25.16	10.00
Salaries – Sub-Total					85.06		118.91	110.08
Pension liability of electricity distribution business					18.50		20.01	20.81
Salaries – Total	48.71	68.94	68.34	58.95	103.56	61.19	138.92	130.89

1.31 The Commission in its previous MYT order has approved the employee cost of Rs.58.95 Cr and Rs.61.19 Cr. during FY 2009-10 and FY 2010-11 before giving effect to the efficiency factor of 3% and 4% respectively.

R&M Expenses

1.32 NDMC has stated that it has projected its R&M expenses as per the MYT Regulation, 2007 as per the following formula:

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

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

1.33 The value of K has been considered to be 4.99% as considered by the Commission in its previous MYT order. The R&M Expenses projected for FY 11-12 have been tabulated below:

Table 11: R&M Expenses (Rs. Cr.)

R & M Expenses	2007-08	2008-09		2009-10		2010-11		2011-12
	Actual Trued Up by Commission	Approved in the MYT order	Actual as per True Up petition	Approved in the June 2009 order	Actual as per True Up petition	Approved in the MYT Order	Revised estimates as per petition	Estimates as per petition
Opening GFA	343.14	406.51	418.64	561.63	561.63	763.39	763.39	905.74
% of Opening GFA	4.99%	4.99%	4.99%	4.99%	4.99%	4.99%	4.99%	4.99%
R&M expenses	17.13	21.23	20.81	28.98	28.98	39.05	39.05	45.21

A&G expenses

1.34 For projecting the A&G expenses during FY 2011-12, NDMC has taken the A&G approved by the Commission in its previous MYT order for FY 2010-11 and applied the escalation factor to project the A&G expense of Rs. 14.39 Cr. during FY 2011-12.

Table 12: A&G Expenses (Rs. Cr.)

Particulars	2007-08	2008-09		2009-10		2010-11		2011-12
	Actual Trued Up by Commission	Approved in the MYT order	Actual as per True Up petition	Approved in the June 2009 order	Actual as per True Up petition	Approved in the MYT Order	Revised estimates as per petition	Estimates as per petition
A&G Expenses	11.93	12.43	9.78	12.95	12.95	13.48	13.48	14.39

1.35 It may however be noted that the licensee has considered the base A&G expenses without giving effect to the efficiency factor of 4% during FY 2010-11.

Allocation of Admin & Civil department expenses

1.36 NDMC has stated that it has followed the Commission's order dated 2nd November, 2005 for allocation of expenditure relating Administrative and Civil Engineering Departments to Electricity Supply. Accordingly, it has allocated 19% of the employee salaries (except for the electricity business) in the electricity supply business, besides an additional provision of Rs. 10 Cr for the cost incurred by the Civil Engineering Department.

1.37 The estimated salary of NDMC employees (except for the electricity business) for the FY 2010-11 has been escalated by 4 % for projecting the salary for FY 11-12. Allocation of total expenses against admin and civil engineering department towards electricity distribution business is tabulated hereunder:

Table 13: Allocation of Admin and Civil Engineering Expenses (Rs. Cr)

Particulars	2007-08	2008-09		2009-10		2010-11		2011-12
	Actual Trued Up by Commission	Approved in the MYT order	Actual as per True Up petition*	Approved in the June 2009 order	Actual as per True Up petition	Approved in the MYT Order	Revised estimates as per petition	Estimates as per petition
Salary head for NDMC except electricity distribution business					276.51		274.68	285.67
Pension liabilities of NDMC excluding electricity distribution business					90.45		89.86	93.45

Particulars	2007-08	2008-09		2009-10		2010-11		2011-12
	Actual Trued Up by Commission	Approved in the MYT order	Actual as per True Up petition*	Approved in the June 2009 order	Actual as per True Up petition	Approved in the MYT Order	Revised estimates as per petition	Estimates as per petition
Total Salary expenses					366.96		364.54	379.12
Allocation of Admin related expenses to Electricity Supply Business of NDMC	35.37	35.37	68.02	35.37	69.72	35.37	69.26	72.03
Cost of civil engineering department	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Total allocation of Admin and Civil Engineering Department to Electricity Distribution Business	45.37	45.37	78.02	45.37	79.72	45.37	79.26	82.03

1.38 The Commission in its previous MYT order has approved Admin and Civil Engg. Department expenses of Rs. 45.37 Cr for the entire control period which includes Rs. 10 Cr. for Civil Engg. Department and Rs.35.37 Cr. for Admin Department.

GFA & Depreciation

1.39 NDMC has proposed a capitalisation of assets to the tune of Rs.75.00 Cr during FY 2010-11 and Rs.200.00 Cr during FY 2011-12.

1.40 Depreciation is charged on the basis of straight-line method, on the fixed assets in use at the beginning of the year. For FY 2010-11 and FY 11-12 is determined by applying the actual rate of depreciation as approved by the Commission on the opening balance of Gross Fixed Assets (GFA) projected for FY 10-11 and FY 11-12 i.e. @ 3.6 % of opening level of GFA, as tabulated hereunder:

Table 14: Depreciation (Rs. Cr)*

Particulars	2007-08	2008-09		2009-10		2010-11		2011-12
	Actual Trued Up by Commission	Approved in the MYT order	Actual as per True Up petition	Approved in the June 2009 order	Actual as per True Up petition	Approved in the MYT Order	Revised estimates as per petition	Estimates as per petition
GFA (Opening)	343.14	406.51	406.51	561.63	561.63	763.39	763.39	905.74
Additions	63.36	155.12	155.12	201.76	201.76	142.35	142.35	70.00
Reductions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GFA (Closing)	406.51	561.63	561.63	763.39	763.39	905.74	905.74	975.74

Particulars	2007-08	2008-09		2009-10		2010-11		2011-12
	Actual Trued Up by Commission	Approved in the MYT order	Actual as per True Up petition	Approved in the June 2009 order	Actual as per True Up petition	Approved in the MYT Order	Revised estimates as per petition	Estimates as per petition
Average GFA	374.82	484.07	484.07	662.51	662.51	834.56	834.56	940.74
Depreciation Rate	3.60%	3.60%	3.60%	3.60%	3.60%	3.60%	3.60%	3.60%
Depreciation	13.49	17.43	17.43	23.85	23.85	30.04	30.04	33.87
Accumulated Depreciation (closing)	252.74	270.17	270.17	294.02	294.02	324.07	324.07	357.93
Net Block	153.77	291.45	291.45	469.37	469.36	581.67	581.67	617.80

*Depreciation and RoCE shall be dealt as per Regulation 4.16 (b) (ii) of MYT Regulation 2007

1.41 The Commission in its previous MYT order has approved the depreciation cost of Rs.23.85 Cr and Rs. 30.04 Cr for FY 2009-10 and FY 2010-11 respectively.

Return on Capital Employed (RoCE)

1.42 NDMC has stated that it has computed Return on Capital Employed (RoCE) as per methodology approved by the Commission in their previous MYT order, as tabulated hereunder:

Table 15: Return on Capital Employed (Rs. Cr.)*

Particulars	2007-08	2008-09		2009-10		2010-11		2011-12
	Actual Trued Up by Commission	Approved in the MYT order	Actual as per True Up petition	Approved in the June 2009 order	Actual as per True Up petition	Approved in the MYT Order	Revised estimates as per petition	Estimates as per petition
RB (Opening)	112.07	179.21	179.21	327.86	327.86	509.98	527.37	662.76
Δ AB	49.87	137.69	137.69	177.91	177.91	112.31	112.31	36.13
Investments in the Year	63.36	155.12	155.12	201.76	201.76	142.35	142.35	70.00
Depreciation	13.49	17.43	17.43	23.85	23.85	30.04	30.04	33.87
Consumer Contribution	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00
Change in WC	17.27	10.96	10.96	4.20	21.60	11.00	23.08	2.90
RB (Closing)	179.21	327.86	327.86	509.98	527.37	633.29	662.76	701.79
Regulated Rate Base (RRBi)	154.28	259.02	259.02	421.02	438.41	577.13	606.60	683.73
Equity	0.00	0.00	0.00		0.00		0.00	0.00
Debt		530.71	530.71		708.62		820.92	857.05
Rate of return on Equity	16.00%	16.00%	16.00%	16.00%	16.00%	16.00%	16.00%	16.00%
Rate of Return on Debt	11.50%	11.50%	11.50%	11.50%	11.50%	11.50%	11.50%	11.50%
WaCC	11.50%	11.50%	11.50%	11.50%	11.50%	11.50%	11.50%	11.50%
RoCE	17.74	29.79	29.81	48.42	50.42	66.37	69.76	78.63

*Depreciation and RoCE shall be dealt with as per Regulation 4.16 (b) (ii) of MYT Regulation 2007

1.43 Rate of return on the Debt (i.e. 11.50% p.a.) for FY 2011-12 is kept at the same level as approved by the Commission in its previous MYT order.

- 1.44 All components for calculation of RoCE have been kept at same level as already approved by the Commission except the Change in Working Capital. This has been changed from commission approved values due to the consideration of the actual employee costs incurred by NDMC.
- 1.45 The Commission in its MYT order has approved RoCE of Rs.48.42 Cr and Rs.66.37 Cr for FY 2009-10 and FY 2010-11 respectively.

Non Tariff Income (NTI)

- 1.46 Apart from the revenue earned in accordance with the tariff schedule from supplying power to consumers, Distribution Licensees also earn income from other sources such as interest received on deposits, loans and advances; charging meter rent from consumers; delayed payment surcharge levied on bills that are paid late; sale of scrap, etc. This income is called Non-Tariff Income (NTI) and it needs to be subtracted from the average revenue requirement of the Licensee.
- 1.47 NDMC has proposed the following amounts as NTI for FY 2009-10, 2010-11 and 2011-12. For projecting the non-tariff income for FY 11-12, an increase at 5% p.a. has been considered over the estimated FY 10-11 non-tariff income. Details of the year wise non-tariff income is provided in tabulated hereunder:

Table 16: Non Tariff Income (Rs. Cr)

Particulars	2007-08	2008-09		2009-10		2010-11		2011-12
	Actual Trued Up by Commission	Approved in the MYT order	Actual as per True Up petition	Approved in the June 2009 order	Actual as per True Up petition	Approved in the MYT Order	Revised estimates as per petition	Estimates as per petition
Non Tariff Income	3.59	3.22	8.24	3.35	9.19	3.48	9.65	10.13

Annual Revenue Requirement (ARR)

- 1.48 On the basis of the costs incurred in the year 2009-10, and projections for 2010-11 and 2011-12, and after subtracting the Non Tariff Income for each of the three years, NDMC has projected the following Annual Revenue Requirement:

Table 17 Proposed ARR (Rs Cr)

Particulars	2007-08	2008-09		2009-10		2010-11		2011-12
	Actual Trued Up by Commission	Approved in the MYT order	Actual as per True Up petition	Approved in the June 2009 order	Actual as per True Up petition	Approved in the MYT Order	Revised estimates as per petition	Estimates as per petition
Costs								
Net Power Purchase Cost (including PGCIL Charges)	191.01	253.11	73.63	233.16	358.46	332.31	467.74	477.90

Particulars	2007-08	2008-09		2009-10		2010-11		2011-12
	Actual Trued Up by Commission	Approved in the MYT order	Actual as per True Up petition	Approved in the June 2009 order	Actual as per True Up petition	Approved in the MYT Order	Revised estimates as per petition	Estimates as per petition
Employee Cost	77.77	100.55	98.93	97.85	103.56	109.17	138.92	130.89
A&G Cost					12.95		13.48	14.39
R&M Cost					28.98		39.05	45.21
Depreciation	13.49	17.43	17.43	23.85	23.85	30.04	30.04	33.87
ROCE	17.74	29.79	29.79	48.42	50.96	66.37	70.35	79.24
Total Costs	300.01	400.88	219.78	403.28	578.76	537.89	759.58	781.49
Total allocation of Admin and Civil Engineering Department to Electricity Distribution Business	45.37	45.37	78.02	45.37	79.72	45.37	79.26	82.03
<i>Less: Non-Tariff Income</i>	3.59	3.22	8.24	3.35	9.19	3.48	9.65	10.13
<i>Less: Financial Impact on account of non-achievement of AT&C losses</i>	20.38							
<i>Less: Surplus for FY06-07</i>	21.89							
<i>Energy Conservation</i>				2.00				
Aggregate Revenue Requirement	299.42	443.04	289.56	447.29	649.30	579.78	829.20	853.40

Revenue from Sale of Power

1.49 NDMC has projected the revenue of Rs. 555.57 Cr, Rs.591.30 Cr and Rs. 614.83 Cr from sale of power during FY 2009-10, FY 2010-11 and FY 2011-12 respectively.

1.50 Considering the collection efficiency of 98% during FY 2009-10 and 99% during FY 2010-11 and 100% for FY 2011-12, revenue realized from sale of power amounts to Rs.544.68 Cr, Rs.585.39 Cr and Rs.608.68 Cr respectively.

Table 18: Revenue Realised (Rs Cr)

Particulars	2007-08	2008-09		2009-10		2010-11		2011-12
	Actual Trued Up by Commission	Approved in the MYT order	Actual as per True Up petition	Approved in the June 2009 order	Actual as per True Up petition	Approved in the MYT Order	Revised estimates as per petition	Estimates as per petition
Revenue realized from sale of Power	483.46	516.28	503.45	533.62	544.68	-	585.39	608.68

Revenue Gap

1.51 Based on the above the net gap projected by NDMC during FY 2009-10, FY 2010-11 and FY 2011-12 amounts to Rs.104.61 Cr, 243.81Cr and 244.72 Cr respectively.

Table 19: Revenue Gap (Rs Cr)

Particulars	2007-08	2008-09		2009-10		2010-11		2011-12
	Actual Trued Up by Commission	Approved in the MYT order	Actual as per True Up petition	Approved in the June 2009 order	Actual as per True Up petition	Approved in the MYT Order	Revised estimates as per petition	Estimates as per petition
Aggregate Revenue Requirement	299.42	443.04	289.56	447.29	649.30	579.78	829.20	853.40
Revenue realized from sale of Power	483.46	516.28	503.45	533.62	544.68	-	585.39	608.68
Surplus/(Gap) for the Year	183.93	73.24	213.88	86.33	(104.61)	-	(243.81)	(244.72)

1.52 The table below gives the Revenue Surplus / (Gap) including carrying cost for FY2007-08, FY2008-09, FY 2009-10, FY 2010-11 and FY 2011-12. As NDMC has not proposed any carrying cost, the Commission has considered SBI PLR rate as carrying cost as proposed by the other licensees to bring parity to tariff proposals

Table 20: Revenue Gap with Carrying Cost

Particulars	2007-08	2008-09	2009-10	2010-11	2011-12
Opening Revenue Surplus / (Gap)	21.89	220.06	475.21	421.90	215.41
Revenue Surplus / (Gap) for the year	183.93	213.88	(104.61)	(243.81)	(244.72)
SBI PLR Rate	0.13	0.13	0.12	0.12	0.13
Carrying Cost	14.24	41.27	51.30	37.32	12.10
Closing Revenue Surplus/ (Gap) with Carrying Cost	220.06	475.21	421.90	215.41	(17.21)

Tariff Proposal

1.53 For the estimated revenue gap of Rs. 243.81 Cr during FY 2010-11, NDMC has requested for some suitable recovery mechanism at the time of trueing-up petition for FY 2010-11.

1.54 To address the projected revenue gap of Rs.244.72 Cr during FY 2011-12, NDMC has submitted in its petition that it had already proposed 16% hike in tariff in the true up petition of 08-09 and revised ARR for FY 2010-11 to the Commission, which is under the consideration. Considering this 16% tariff hike, NDMC can additional amount of Rs. 98.37 Crs during FY 2011-12, still leaving a gap of Rs. 146.35 Cr.

1.55 NDMC proposes to entirely recover the revenue gap for the year 2011-12 through a uniform increase in Retail supply tariff of 20% across all categories in fixed and energy charges in addition to the already proposed tariff hike of 16%.

Table 21: Revenue at Existing and Proposed Tariff

S.N.	Consumer Category	Cost of Supply (Rs/unit)	Energy Billed (MU)	At Existing Tariff			As per the previous year tariff proposal				As per the ensuing year tariff proposal			
				Revenue Billed (Rs Cr)	Avg Realization FY 12 (Rs/unit)	% of COS	Hike Proposed	Avg Realization FY 12 (Rs/unit)	Proposed Revenue Realization (Rs Cr)	% of COS	Hike Proposed	Avg Realization FY 12 (Rs/unit)	Proposed Revenue Realization (Rs Cr)	% of COS
1	Domestic	6.99	255.15	80.19	3.14	45%	16%	3.65	93.02	52%	20%	4.37	111.62	63%
	Single delivery point	6.99	88.40	30.62	3.46	50%	16%	4.02	35.52	57%	20%	4.82	42.62	69%
	Separate delivery point	6.99	146.74	41.97	2.86	41%	16%	3.32	48.68	47%	20%	3.98	58.42	57%
	Domestic Power	6.99	20.02	7.60	3.80	54%	16%	4.40	8.81	63%	20%	5.28	10.58	76%
2	Non Domestic	6.99	267.81	139.29	5.20	74%	16%	6.03	161.57	86%	20%	7.24	193.88	104%
	Single phase	6.99	53.03	24.74	4.66	67%	16%	5.41	28.69	77%	20%	6.49	34.43	93%
	Three phase	6.99	214.78	114.55	5.33	76%	16%	6.19	132.88	88%	20%	7.42	159.45	106%
3	Mixed Load	6.99	678.14	389.89	5.75	82%	16%	6.67	452.27	95%	20%	8.00	542.72	114%
	Supply on 11 KV (HT)	6.99	466.30	262.16	5.62	80%	16%	6.52	304.10	93%	20%	7.83	364.92	112%
	LT (400V) where supply is given from NDMC sub-station	6.99	4.45	3.05	6.87	98%	16%	7.97	3.54	114%	20%	9.56	4.25	137%
	Where the applicant	6.99	207.40	124.67	6.01	86%	16%	6.97	144.62	100%	20%	8.37	173.55	120%

S.N.	Consumer Category	Cost of Supply (Rs/unit)	Energy Billed (MU)	At Existing Tariff			As per the previous year tariff proposal				As per the ensuing year tariff proposal			
				Revenue Billed (Rs Cr)	Avg Realization FY 12 (Rs/unit)	% of COS	Hike Proposed	Avg Realization FY 12 (Rs/unit)	Proposed Revenue Realization (Rs Cr)	% of COS	Hike Proposed	Avg Realization FY 12 (Rs/unit)	Proposed Revenue Realization (Rs Cr)	% of COS
	provides built up space for sub-station													
4	Small Industrial Power	6.99	0.45	0.19	4.21	60%	16%	4.88	0.22	70%	20%	5.86	0.26	84%
5	Public Lighting	6.99	10.10	3.83	3.79	54%	16%	4.39	4.44	63%	20%	5.27	5.33	75%
6	Others	6.99	9.01	1.46	1.62	23%	16%	1.88	1.69	27%	20%	2.25	2.03	32%
7	DMRC	6.99		0.00		0%	16%	0.00	0.00		20%	0.00	0.00	0%
	Grand Total	6.99	1220.67	614.83	5.04	72%		5.84	713.20	84%		7.01	855.84	100%