

## A1: INTRODUCTION

- 1.1 This staff paper contains summary of the petition filed by NDMC for true up of 2008-09. For the purpose of comparison, the staff paper also contains the figures for the year as approved by the Commission in the MYT Order.
- 1.2 The Commission shall true up the uncontrollable parameters (Sales and Power Purchase) viz-a-viz the audited account of distribution licensees after prudence check and as far as the controllable parameters 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

- 1.3 NDMC has submitted that its actual energy sales were 1064.40 MU in 2008-09 against the approved energy sales of 1082.98 MU in the MYT Order.
- 1.4 Since energy sales are treated as an uncontrollable factor, NDMC has requested the Commission to approve the actual sales for 2008-09 instead of the comparatively higher sales approved for the year in the MYT Order, as shown in Table 1 below.

**Table 1 Energy sales in 2008-09**

Sale of Energy (MU)	2008-09	
	Approved in the MYT Order	As per petition
Domestic	215.59	208.98
Single Deliver Point	63.31	69.21
Separate Delivery Point	129.87	120.53
Domestic Power	22.41	19.24
Non Domestic	257.86	250.81
Single Phase	60.39	51.15
Three Phase	197.47	199.66
Mixed Load	596.97	589.10
Supply at 11 KV (HT)	374.43	387.33
Supply on LT where supply is given from NDMC sub-station	7.38	4.82
Supply on LT where applicant provides built up space for sub-station	215.17	196.95
Small Industrial Power	0.35	0.27
Public Lighting	8.23	8.73
Others	3.99	6.50

Sale of Energy (MU)	2008-09	
	Approved in the MYT Order	As per petition
DMRC	0	0.00
<b>Sum Total</b>	<b>1,082.98</b>	<b>1,064.40</b>

## AT&C Losses

- 1.5 After consideration of the power purchase quantum and the prevailing loss levels in CTU network, NDMC has submitted the quantum of power available at DTL periphery as 2163.23 MU in 2008-09. The power consumed in NDMC license area is given to be 1187.32 MU and the rest of available power was sold under bilateral agreement, UI mechanism and to other Discoms at NDMC periphery.
- 1.6 NDMC has submitted that its collection efficiency is lower than the targeted level on account of the increasing number of cases of “premises locked” reported during the period. The Licensee has submitted that it is taking corrective measures to tackle such problems in the current and future years. However, considering this lower level of collection efficiency, NDMC has requested the Commission to approve the revised AT&C Loss target proposed in its petition, as shown below:

**Table 2 AT&C Loss proposed by NDMC**

Particulars	2008-09	
	Approved in the MYT Order	As per petition
AT&C Losses	10.75%	13.03%
Distribution Losses	10.75%	10.35%
Collection Efficiency	100%	97.01%

## Power Purchase Requirement

- 1.7 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.
- 1.8 The energy sales for a year is grossed up by the loss levels for that year, to arrive at the required quantum of power purchase for that year to supply own consumers in the following manner:

$$\text{Quantum of power purchase (MU)} = \frac{\text{Energy sales}}{(1 - \text{Distribution Loss (\%)/100})}$$

- 1.9 Table 3 below shows the actual sales, loss levels and power purchase for the year 2008-09 by the Licensee.

**Table 3 Actual Sales, Loss & Power Purchase**

	<b>Units</b>	<b>Quantum</b>
Power Purchase from CGS	MU	1596.75
PGCIL Losses	%	0.04
Less: PGCIL Losses	MU	29.38
Power Purchase from Delhi Gencos	MU	594.26
Intra-state Power Purchase	MU	1.59
Less: Power Sold through Bilateral Agreement	MU	264.54
Less: Under-drawl of Power under UI	MU	449.70
DTL Losses	%	1.59%
Less: DTL Losses	MU	23.06
Less: Surplus Power Sold at Discom Boundary	MU	238.61
Net Power Available for Sale to NDMC Consumers	MU	1187.32
Energy Sold to the Consumers	MU	1064.40
Distribution Losses	MU	10.35%
Revenue Billed (Including NDMC Tax @ 5%)	Rs. Cr	543.75
Revenue Realised (Including NDMC Tax @ 5%)	Rs. Cr	527.49
Collection Efficiency	%	97.01%
Units Realised	MU	1032.58
AT&C Losses	%	13.03%

### **Power Purchase Cost**

- 1.10 As per the MYT Regulations, 2007, power purchase cost is uncontrollable and 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

1.11 NDMC has submitted that on account of the its efforts in selling surplus energy at the best possible rates, the net power purchase cost to NDMC for sale to its consumers is estimated as a low Rs. 73.62 Cr, as opposed to Rs. 253.12 Cr approved in the MYT Order. Thus, the actual rate of power sale to consumers for 2008-09 is Rs. 0.62 per unit, while the rate approved in the MYT Order was Rs. 2.08 per unit.

1.12 Table 4 below shows the power purchase quantum and rate of purchase submitted by NDMC for the Commission's approval for the year 2008-09 (actuals) along with the figures approved in the MYT Order.

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

Particulars	2008-09					
	Approved in the MYT Order			Actuals as per True-up Petition		
	MUs	Rs. Crs	Rs./Unit	MUs	Rs. Crs	Rs./Unit
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						
<b>Sub-Total (A)</b>	<b>2088.29</b>	<b>509.93</b>	<b>2.44</b>	<b>2192.60</b>	<b>638.77</b>	<b>2.91</b>
Bilateral Purchase						
Inter Discom Purchase						
<b>Sub Total (B)</b>	-	-	-			
<b>Transmission Charges (C )</b>		<b>22.15</b>			<b>33.79</b>	
<b>Total Power Purchase Cost (A +B +C)</b>	<b>2088.29</b>	<b>531.45</b>	<b>2.54</b>	<b>2192.60</b>	<b>672.56</b>	<b>3.07</b>
Less: Bilateral Sale						
Less: Inter Discom Sale				(503.15)	(598.93)	6.28
Less: Net UI				(449.70)		
<b>Sub Total</b>	<b>(826.55)</b>	<b>(278.96)</b>	<b>3.37</b>	<b>(952.85)</b>	<b>(598.93)</b>	<b>6.28</b>
<b>Less: Losses</b>	<b>(48.31)</b>			<b>(52.44)</b>		
<b>Net Purchase Cost</b>	<b>1213.43</b>	<b>253.12</b>	<b>2.08*</b>	<b>1187.31</b>	<b>73.63</b>	<b>0.62*</b>

\*includes transmission charges

## O&M Expenditure

1.13 NDMC has submitted that for 2008-09 it incurred a total of Rs 98.93 Cr on O&M expenses, as compared to Rs 100.55 Cr approved in the MYT Order for the year as shown in the table below.

**Table 5 Proposed O&M expenses for 2008-09\***

O&M Expenses inclusive of efficiency improvement factor (Rs. Cr)	2008-09	
	Approved in the MYT Order	As per petition
Employee Cost	67.56	68.34
A&G Expenses	12.18	9.78
R&M Expenses	20.81	20.81
<b>Total O&amp;M expenses</b>	<b>100.55</b>	<b>98.93</b>

\* Net of efficiency factor @ 2%

## Employee Cost

1.14 NDMC has submitted that the actual employee expenses in 2008-09 were Rs. 68.34 Cr, the break up of which is given below.

**Table 6 Actual Employee Cost for 2008-09**

Particulars (Rs. Cr)	2008-09
Salaries	36.72
Additional Pay / DA	7.74
Other Allowances & Relief	23.21
Honorarium/Overtime	0.35
Bonus/Ex gratia To Employees	0.22
Leave Travel Assistance	0.10
<b>Grand Total</b>	<b>68.34</b>
Employee expenses capitalised	0.00
<b>Net Employee expenses</b>	<b>68.34</b>

## A&G Expenses

1.15 The actual A&G expenses incurred during 2008-09 have been submitted as Rs. 9.78 Cr, as shown below.

**Table 7 Actual A&G Expenses for 2008-09**

Particulars (Rs. Cr)	2008-09
Telephone, Postage, Telegram & Telex Charges	9.38
Consultancy Charges	0.22

<b>Particulars (Rs. Cr)</b>	<b>2008-09</b>
Conveyance And Travel	0.01
Fee And Subscriptions Books And Periodicals	0.00
Miscellaneous Expenses	0.17
<b>Sub-Total of other charges</b>	<b>9.78</b>
A&G expenses capitalized	0.00
<b>Net A&amp;G expenses</b>	<b>9.78</b>

## R&M Expenses

1.16 NDMC has submitted that it is in the process of finalization of accounts and is still considering the determination of opening GFA for its electricity business. Therefore, for the time being, the Licensee has submitted that it is not able to determine the R&M expenses and the K factor based on the methodology provided in the MYT Regulations. Hence, NDMC has considered the R&M expenses for 2008-09 at the level as determined by the Commission in the MYT Order.

## Depreciation

1.17 According to the MYT Regulations, 2007, depreciation charges are not to be trued up on an annual basis and shall be trued up only once at the end of the Control Period. Hence, NDMC has assumed the same depreciation as allowed by the Commission in its MYT Order for the purpose of ARR computation.

**Table 8 Depreciation for 2008-09**

<b>Depreciation (Rs. Cr)</b>	<b>2008-09</b>	
	<b>Approved in the MYT Order</b>	<b>As per petition</b>
Depreciation	17.43	17.43

## Return on Capital Employed (RoCE)

**Like depreciation, Return on Capital Employed is not reviewed on an annual basis and will be trued up only once at the end of the Control Period. Hence, for the purpose of ARR calculation, NDMC has assumed the same RoCE as allowed by the Commission in its MYT Order, as shown in**

1.18 Table 9 below.

1.19 However, NDMC has asked for an additional Rs. 0.02 Cr as interest and finance charges. NDMC has submitted that in order to undertake all capital expenditure works, it uses its reserve Municipal funds and does not take any loan and hence does not have any loan liability. However, it has considered an amount of Rs. 1.85 lakh against bank charges on account of issuance of LCs to the generators.

**Table 9 Return on capital employed (RoCE) for 2008-09\***

RoCE including additional Supply Margin (Rs. Cr)	2008-09	
	Approved in the MYT Order	As per petition
RoCE	29.79	29.79
Interest & Finance Charges	-	0.02

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

### **Allocation of expenditure related to Administrative and Civil Engineering Departments to Electricity Distribution**

- 1.20 Since NDMC has other businesses apart from its electricity distribution business, a certain portion of its total expenses under the Administrative Department head are allocated to the distribution business. In its petition, NDMC has quoted the Commission's tariff order for 2005-06 for considering an allocation of 19% of the salary expenses of its Administrative department towards its electricity distribution business for the year 2008-09. The allocation of expenses against this head comes out to be Rs. 68.02 Cr.
- 1.21 Further, since NDMC is yet to segregate the expenses shared by its Civil Engineering Department on account of electricity distribution business, it has requested the Commission to consider an amount of Rs. 10 Cr against this head, which is the same as approved in the tariff order for 2005-06 as well as in the MYT Order.
- 1.22 Table 10 below gives a summary of the allocation of expenditure of Administrative and Civil Engineering Departments for 2008-09 submitted by NDMC.

**Table 10 Allocation of expenditure related to Administrative and Civil Engineering Department to the Electricity Distribution business for 2008-09**

Particulars (Rs. Cr)	2008-09	
	Approved in the MYT Order	As per petition
Salary Head for NDMC except Electricity Distribution business		269.77
Pension Liabilities of NDMC except Electricity Distribution business		88.25
Total Salary Expenses		358.01
Allocation of Admin related expenses to Electricity Supply Business of NDMC @19%	35.37	68.02
Civil Engineering Department	10.00	10.00
<b>Total Allocation of Admin and Civil Engineering Department to Electricity Distribution Business</b>	<b>45.37</b>	<b>78.02</b>

### **Non Tariff Income (NTI)**

1.23 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.

1.24 NDMC has proposed the following amount as NTI for 2008-09.

**Table 11 Non Tariff Income for 2008-09**

Non Tariff Income (Rs. Cr)	2008-09	
	Approved in the MYT Order	As per petition
Total Non-Tariff Income	3.22	8.24

### Annual Revenue Requirement (ARR)

1.25 On the basis of its actual costs incurred in the year 2008-09 and after subtracting the Non Tariff Income for the year, NDMC has projected the following Annual Revenue Requirement.

**Table 12 ARR for 2008-09**

Particulars (Rs. Cr)	2008-09	
	Approved in the MYT Order	As per petition (actual)
Net Power Purchase Cost	230.97	39.84
Inter-state Transmission Charges	7.85	13.18
Intra-State Transmission Charges	13.67	16.68
SLDC Fee and Charges	0.63	3.93
Operations & Maintenance Costs	100.55	98.93
Depreciation	17.43	17.43
Return on Capital Employed	29.79	29.79
Interest and Finance Charges	0.00	0.02
Administrative & Civil Engineering Department Expenses allocated to electricity	45.37	78.02
<i>Less:</i> Non Tariff Income	(3.22)	(8.24)
<b>Aggregate Revenue Requirement</b>	<b>443.04</b>	<b>289.57</b>

### Revenue from Sale of Power

1.26 NDMC has submitted that based on the tariff rates as approved by the Commission and the monthly consumption, it has raised bills of Rs. 543.75 Cr to its consumers against energy and demand charges. NDMC has submitted that it achieved greater sales in the



year 2008-09 than projected in the MYT Order and has shown the energy sales of 2008-09 as given below.

**Table 13 Proposed energy sales, revenue billed and ABR in 2008-09**

Energy Sales	Unit	2008-09
		As per petition
Energy Billed	MU	1064.40
Revenue Billed	Rs. Cr	543.75
Average Billing Rate	Rs./unit	5.11

### Revenue available towards ARR

1.27 NDMC has submitted that based on the tariff rates as approved by the Commission and the monthly consumption, it has raised bills of Rs. 543.75 Cr to its consumers against energy and demand charges. The total revenue realized from consumers in 2008-09 is submitted to be Rs. 503.35 Cr after deducting the NDMC tax amount.

**Table 14 Revenue available towards ARR submitted by the Petitioner (Rs. Cr)**

Revenue from Sale of Power to Consumers	Rs. Cr
Tariff Revenue	471.17
Demand Charges	44.63
LT S/c	11.69
<b>Total Revenue (Amount Collected)</b>	<b>527.49</b>
Less: Taxes @ 5% on Tariff Revenue	24.14
<b>Net Revenue</b>	<b>503.35</b>

### Revenue Gap

1.28 NDMC has submitted that it has calculated a revenue surplus of Rs. 213.78 Cr for 2008-09, as shown below.

**Table 15 Computation of revenue gap by NDMC**

Particulars (Rs Cr)	Approved in the MYT Order	As per petition
ARR for FY 2008-09	443.04	289.57
Revenue available towards ARR	516.28	503.35
<b>(Gap)/ Surplus</b>	<b>73.24</b>	<b>213.78</b>