

Before The
Delhi Electricity Regulatory Commission, Delhi

IN THE MATTER OF: Approval of True Up for FY 2016-17; Revised ARR for FY 2017-18 & ARR and Determination of Tariff for FY 2018-19

AND

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

The applicant respectfully submits as hereunder that: -

- 1.1 NDMC (hereinafter referred to as "NDMC" or "Petitioner") is a Municipal Council entrusted with the distribution of electricity to the consumers in the New Delhi Municipal area under Section 195 to 201 of the New Delhi Municipal Council Act 1994.
- 1.2 As per Section 200 of the New Delhi Municipal Council Act 1994, NDMC had 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.
- 1.3 The Govt. of India had 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.

- 1.4 NDMC has been considered as the deemed distribution licensee under the Electricity Act 2003 in respect of the area under New Delhi Municipal Council.
- 1.5 Pursuant to the enactment of the EA 03, the Hon'ble Delhi Electricity Regulatory Commission (DERC) has framed Regulations specifying the terms and conditions for determination of tariff as amended from time to time as summarised below:
- Delhi Electricity Regulatory Commission 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.
 - DERC Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 vide notification dated December 02, 2011, specifying Terms and Conditions for Determination of Tariff for Distribution of electricity under the Multi Year Tariff (MYT) framework for the second control period i.e. period FY13 - FY16. DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017 (hereinafter would be referred as 'DERC Tariff Regulations, 2017') vide notification dated Jan 31, 2017.
- 1.6 NDMC had filed Petition No. 19 of 2017 for True-up for 2014-15 and review of ARR for FY 2015-16 and Business Plan and MYT petition for 3rd control period FY 2016-17 to FY 2020-21 and corresponding tariff determination for FY 2016-17, and filed subsequent Petition No. 28 of 2017 for True-up for FY 2015-16, Revised ARR for FY 2016-17, and corresponding determination of tariff for FY 2017-18.
- 1.7 The Hon'ble Commission disposed-off both the petitions vide its letter F.11(1388/DERC/2016-17/ dated Aug 31, 2017. In the said order, the Hon'ble Commission approved the true-up for 2014-15 and 2015-16 and determined the tariff for FY 2017-18.
- 1.8 For FY 2016-17, the Hon'ble Commission had observed that the true-up for this year shall be undertaken once the audited figures for the entire financial year are made available through a separate petition.
- 1.9 By means of this instant petition, NDMC is submitting the True-up of FY 2016-17 in accordance with the provisions of the DERC Wheeling and Retail Tariff Regulations, 2011. Further, the revised ARR for FY 2017-18, and the ARR and

corresponding Tariff for FY 2018-19 is being submitted by NDMC in accordance with the DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017.

- 1.10 While submitting this information, NDMC has made efforts to adhere to most of the Regulations framed by the Hon'ble Commission.
- 1.11 Formats for ARR and Tariff Filing have been enclosed as Volume II along with a soft copy in CD
- 1.12 NDMC requests the Hon'ble Commission to approve True Up for FY 2016-17, revised ARR for FY 2017-18 and corresponding determination of ARR and Tariff for FY 2018-19.

Prayers to the Hon'ble Commission

- 1.13 NDMC respectfully prays that the Hon'ble Commission to:
 - (a) Condone delay in submitting the ARR and Tariff for FY 2018-19
 - (b) Consider the submissions and approve True-up for FY 2016-17, as per DERC Tariff Regulations, 2011, and review and approve the revised ARR for FY 2017-18, along with the projected ARR and Tariff for FY 2018-19 as proposed in the petition as per the provisions of DERC Tariff Regulations, 2017
 - (c) Examine the proposal submitted by NDMC for a favorable dispensation as detailed in this document.
 - (d) Consider allocation of power to NDMC as detailed in the petition.
 - (e) 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.
 - (f) 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: _

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2 List of Abbreviations

Abbreviation	Explanation
ARR	Aggregate Revenue Requirement
AT&C Loss	Aggregate Technical and Commercial Loss
A&G	Administrative and General
BST	Bulk Supply Tariff
BTPS	Badarpur Thermal Power Station
CAG	Comptroller and Auditor General
CAGR	Compounded Annual Growth Rate
CCGT	Combined Cycle Gas Turbine
CERC	Central Electricity Regulatory Commission
CEA	Central Electricity Authority
CPI	Consumer Price Index
CWIP	Capital Work in Progress
DERC	Delhi Electricity Regulatory Commission
DISCOM	Distribution Companies (BRPL, BYPL, TPDDL & NDMC)
DMRC	Delhi Metro Rail Corporation
DTL	Delhi Transco Ltd
E-Tax	Electricity tax
FY	Financial Year
GFA	Gross Fixed Assets
GoNCTD	Government of National Capital Territory of Delhi
HT	High Tension
IEX	Indian Energy Exchange
kV	Kilo Volt
kVA	Kilo Volt Ampere
kVAh	Kilo Volt Ampere Hour
kWh	Kilo Watt Hour
LT	Low Tension
MNRE	Ministry of New and Renewable Energy

Abbreviation	Explanation
MU	Million Units
MW/KW	Mega Watt/ Kilo Watt
MYT	Multi Year Tariff
NDMC	New Delhi Municipal Council
NTI	Non-Tariff Income
O&M	Operation and Maintenance
OCFA	Original Cost of Fixed Assets
PGCIL	Power Grid Corporation of India Ltd
PLF	Plant Load Factor
PPAC	Power Purchase Cost Adjustment Charge
PPCL	Pragati Power Corporation Ltd.
PXIL	Power Exchange India
RAPP	Rajasthan Atomic Power Project
REC	Renewable Energy Certificate
R&M	Repairs and Maintenance
RoCE	Return on Capital Employed
RPO	Renewable Purchase Obligation
RRB	Regulated Rate Base
SBU	Strategic Business Unit
SGS	State Generating Station
SLDC	State Load Dispatch Centre
T&D	Transmission & Distribution
TOWMCL	Timarpur Okhla Waste Management Co. Pvt. Ltd.
TPS	Thermal Power Station
UI	Unscheduled Interchange
UMPP	Ultra Mega Power Project
UoM	Unit of Measurement
WACC	Weighted Average Cost of capital
WPI	Wholesale Price Index
YoY	Year on Year

1 Introduction

1.1 NDMC Overview

- 1.1.1 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. NDMC has the obligations of a Licensee under the Indian Electricity Act 1910 in respect of the New Delhi Area.
- 1.1.2 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.
- 1.1.3 Govt. of India notified the Electricity Act, 2003 on June 10, 2003 repealing the Indian Electricity Act-1910, the Electricity (Supply) Act 1948 and the E.R.C. Act, 1998.
- 1.1.4 NDMC has been considered as the deemed distribution licensee under the Electricity Act 2003 in respect of the area under New Delhi Municipal Council.
- 1.1.5 Till March 31, 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 June 28, 2006, GoNCTD issued a set of Policy Directions for making power supply arrangements in Delhi from 1stApril, 2007. These Policy Directions were issued under Section 108 of the Electricity Act, 2003 (hereinafter referred to as the 'Act').
- 1.1.6 With effect from April 01, 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.

1.2 Procedural History

- 1.2.1 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.

- 1.2.2 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 March 07, 2008.
- 1.2.3 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.
- 1.2.4 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.
- 1.2.5 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 in July 2012.
- 1.2.6 NDMC had also submitted True-up Petition for FY 2011-12 and ARR and Tariff Petition for FY 2013-14 in month of January 2013. Subsequently, Hon'ble Commission passed the Tariff Order in July 2013.
- 1.2.7 In the month of January 2014, NDMC submitted True-up Petition for FY 2012-13 and ARR and Tariff Petition for FY 2014-15. The Hon'ble Commission passed the Tariff Order in July 2014.
- 1.2.8 The True-up Petition for FY 2013-14 and the ARR and Tariff Petition for FY 2015-16 was submitted to the Hon'ble Commission by NDMC in February 2015. The Hon'ble Commission passed the Tariff Order in September 2015.
- 1.2.9 NDMC had filed Petition No. 19 of 2017 for True-up for 2014-15 and review of ARR for FY 2015-16 and Business Plan and MYT petition for 3rd control period FY 2016-17 to FY 2020-21 and corresponding tariff determination for FY 2016-17, and filed subsequent Petition No. 28 of 2017 for True-up for FY 2015-16, Revised ARR for FY 2016-17, and corresponding determination of tariff for FY 2017-18.
- 1.14 The Hon'ble Commission disposed-off both the petitions vide its letter F.11(1388/DERC/2016-17/ dated Aug 31, 2017. In the said order, the Hon'ble

Commission approved the true-up for 2014-15 and 2015-16 and determined the tariff for FY 2017-18.

1.3 Current Submission

- 1.3.1 The Hon'ble Commission issued Regulations vide notification dated Jan 31, 2017, specifying Terms and Conditions for Determination of Tariff for Generation, Transmission and Distribution of electricity under the Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2017 (DERC Tariff Regulations, 2017). The said regulations were made effective from Feb 1, 2017.
- 1.3.2 By means of this petition, NDMC is submitting the True-up for FY 2016-17 as per provisions of DERC Wheeling and Retail Tariff Regulations, 2011. Further the petition seeks approval of revised projections for FY 2017-18 and ARR and Tariff approval for 2018-19 as per provisions of DERC Tariff Regulations, 2017.
- 1.3.3 NDMC has made genuine efforts for compiling all relevant information 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. Any additional information required by the Hon'ble Commission shall be made available to the extent the same is available with NDMC.

1.4 Contents

- 1.4.1 The following sections explain in detail truing-up of the ARR for the FY 2016-17, provisional truing-up of ARR for FY 2017-18, and all requisite elements to project the ARR and corresponding Tariff determination for FY 2018-19:
- Category wise Energy Sales & Revenues at existing tariffs
 - AT&C Losses and Energy Requirement
 - Determination of Annual Revenue Requirement by forecast of the following costs, other income & returns:
 - Power Purchase Cost
 - Operation and maintenance Expenses
 - Administrative & Civil Engineering Department Cost
 - Depreciation

- Return on Capital Employed
- Non-Tariff Income

2 True up for FY 2016-17

2.1 Background

- 2.1.1 For the year 2016-17, there was no separate order for approval of ARR and determination of tariff. The Hon'ble Commission had further directed that the approved tariff for 2015-16 shall continue for FY 2016-17. Accordingly, for the purpose of truing up, NDMC has compared the actual parameters with the approved values in 2015-16.
- 2.1.2 As already mentioned, the applicable regulations for FY 2016-17 shall be the DERC Wheeling and Retail Tariff Regulations, 2011. Accordingly, the true-up amount has been calculated as detailed in this section and has been carried forward to the Aggregate Revenue Requirement of FY 2018-19.

2.2 Energy Sales

- 2.2.1 NDMC provides category-wise energy sales data for FY 2016-17 in the table below. The actual energy sales for FY 2016-17 are compared against the approved energy sales of 1366.19 MU by the Hon'ble Commission in its Tariff Order for FY 2015-16. While the actual energy sales in FY 2015-16 have primarily declined owing to demolition of old Central Government residential colonies, which were under reconstruction and the energy efficiency measures taken by NMDC in its area. However, in 2016-17, the sales have increased marginally in comparison to actual sales in 2015-16 and grew to 1312.44 MU as shown in the table below:

Table 1: Category-wise Sales for FY 2016-17 (in MU)

Sl. No.	Consumer Category	FY 2016-17	
		Approved in Tariff Order for 2015-16	Actual
1	Domestic	259.50	256.22
2	Non-Domestic Low Tension (up to 140 kW/150 kVA)	256.03	245.97
3	Mixed Load*	789.88	748.28
4	Small Industrial Power	0.21	0.05

Sl. No.	Consumer Category	FY 2016-17	
		Approved in Tariff Order for 2015-16	Actual
5	Public Lighting	8.08	8.58
6	Others	19.49	11.51
7	DMRC	33.00	41.84
	Total	1,366.19	1312.44

**Mixed Load includes Non-Domestic LT above 140 kW/ 150 kVA and Non-Domestic HT*

2.3 Revenue from Energy Sales

2.3.1 The Revenue billed for the FY17 against the sales achieved by the utility is consolidated from the Form 2.1(a) and is submitted as below:

Table 2: Revenue from Sale of Power for FY 2016-17 (in Rs. Crore)

Sl. No	Particulars	Approved in Tariff Order for FY 2015-16	Actual
1	Revenue Billed (excluding Electricity Tax)	1,080.18	1091.14
2	Surcharge at 8%	43.21	0.01
3	Revenue Billed Excluding Electricity tax and including Surcharge	1,123.39	1091.15
4	Total Revenue Billed for True up	1,123.39	1091.15

2.3.2 NDMC humbly pleads before the Hon'ble Commission that the organization is not registered under Company Act and thus the reports are not audited by Chartered Accountants. All the reports are audited first internally and subsequently by CAG. Owing to this, NDMC will not be able to furnish Auditor's Certificate and requests the Hon'ble Commission to accept this submission.

2.4 AT&C Losses

2.4.1 NDMC submits its AT&C Losses achieved against the losses approved by the Hon'ble Commission vide its Tariff Order for FY 2015-16 as below:

Table 3: AT&C Loss for FY 2016-17

Sl. No.	Particulars	Approved in Tariff Order for 2015-16	Actual
1	AT&C Loss	9.60%	15.67%

2.4.2 NDMC submits that the revenue collected and revenue billed (excluding E. tax) for FY 2016-17 as below:

Table 4: Revenue Realised and Revenue Collected for FY 2016-17

Sl. No	Particulars	Actual
1	Revenue Billed (Rs. Crore)	1,140.42
2	Revenue Realised (Rs. Crore)	1,104.99
3	Collection Efficiency (%)	96.89%

2.4.3 The Revenue Billed includes Fixed Charge, Energy Charges, Other Charges and PPAC Amount Billed. Additionally, NDMC also submits that the Actual Revenue Billed includes Electricity tax amount of Rs 49.28 Crore and Surcharge of Rs 0.01Crore. Therefore, the total Revenue Billed as per Form 2.1(a) is submitted as Rs. 1140.42 Crore from which the deductions for Electricity Tax has been done to arrive at Rs. 1091.54 crore for the FY 2016-17. The AT&C Losses are determined on revenue billed and collected net of Electricity Tax.

2.4.4 NDMC submits the detailed calculation of its AT&C Losses as below. NDMC has achieved distribution losses of 12.97% for FY 2016-17 which is higher than the approved distribution loss of 9.60%.

Table 5: Determination of AT&C Loss for FY 2016-17

Sl. No.	Particulars	Unit	Actual
1	Energy Input at NDMC Periphery	MU	1508.01
2	Units Billed	MU	1312.44
3	Amount Billed	Rs. Crore	1140.42
4	Average Billing Rate	Rs./unit	8.69
5	Distribution Loss	%	12.97%
6	Amount Collected	Rs. Crore	1104.49

Sl. No.	Particulars	Unit	Actual
7	Collection Efficiency	%	96.89%
8	Units Realized	MU	1271.67
9	AT&C Loss Level	%	15.67%

2.5 Power Purchase Quantum

2.5.1 NDMC has allocations of power from Dadri TPS, Badarpur TPS and Pragati Station. The Hon'ble Commission is requested to allow the actual gross power purchase as against the approved gross power purchase quantum as shown in the table below:

Table 6: Power Purchase Quantum for FY 2016-17 (MU)

Sl. No.	Particulars	Approved in Tariff Order for 2015-16	Actual
1	Power Purchase from Central Stations	851.60	423.83
2	Interstate Transmission Losses	26.74	14.83
3	Net Power Purchase from Central Stations	824.86	409.00
4	Power Purchase from State Stations	1,300.42	958.12
5	Power Purchase from Short Term Sources	27.72	265.09
6	Power Purchase from Renewable Sources	3.40	0.62
7	Gross Power Purchase	2,156.40	1,632.84
8	Intra State Transmission Loss	10.65	10.32
9	Net Power Available at NDMC Periphery	2,145.74	1,622.52
10	Sale of Surplus Power	634.48	114.51
11	Net Power available for Retail Sales	1,511.27	1,508.01

2.5.2 In 2016-17 NDMC has drawn long term power from Central Stations viz. Dadri TPS and intra state generating stations viz. Badarpur, Pragati, Power Station (Pragati I and CCGT Bawana) Besides the above, NDMC also resorted to short-term power purchase from IEX, PXIL and other bilateral and banking agreements. NDMC has also purchased power from Renewable sources (Timarpur Okhla Waste Management Co. Ltd). The average inter-state transmission losses and intra-state losses has been considered at 3.50% and 0.85% respectively.

2.5.3 The details of actual power drawn from each of the sources of generation is provided in the appropriate formats specified by the Hon'ble Commission. The Petitioner requests the Hon'ble Commission to kindly consider the actual purchase and approve the same for the purpose of truing up.

2.6 Cost of Power Purchase

2.6.1 NDMC submits the cost of power purchase for the FY 2016-17 as below and prays to the Hon'ble Commission to approve the cost of Rs 675.22 Crore.

Table 7: Cost of Power Purchase from Long Term Sources

Sl. No.	Particulars	Power Purchase (MU)	Power Purchase Cost (Rs. Crore)	Average Rate (Rs./kWh)
	Central Stations			
1	Dadri TPS	423.83	212.85	5.02
	State Generating Stations			
2	Badarpur TPS	282.32	127.18	4.50
3	Pragati I	529.26	222.97	4.21
4	Pragati III- CCGT Bawana	147.16	112.22	7.63
	Total	1382.58	675.22	4.88

2.7 Short Term Power Purchase and Sale

2.7.1 NDMC prays to the Hon'ble Commission to approve the cost of Short Term Power Purchase and Revenue from Short Term Power Sale as below.

Table 8: Short Term Power Purchase, RE Purchase and Sale for FY 2016-17

Sl. No.	Particulars	Power	Amount	Average Rate (Rs./kWh)
		Quantum	(Rs. Crore)	
1	Short-Term Power Purchase	264.47	93.53	3.54
2	Power Purchase from RE Sources	0.62	0.44	7.00
3	Short-Term Power Sale	-39.05	-9.73	2.49

2.8 Rebate on Power Purchase and Transmission Charges

2.8.1 With regard to rebate on Power Purchase and Transmission charges, Clause 5.24 of the DERC Wheeling and Retail Tariff Regulations, 2011 states that:

“Distribution Licensee shall be allowed to recover the net cost of power it procures from sources approved by the Commission viz. Intra-state and Inter-state Trading Licensees, Bilateral Purchases, Bulk Suppliers, State generators, Independent Power Producers, Central generating stations, non-conventional energy generators, generation business of the Distribution Licensee and others, assuming maximum normative rebate available from each source for payment of bills through letter of credit on presentation of bills for supply to consumers of Retail Supply Business.”

2.8.2 NDMC submits the following details for the rebates received by the utility towards its power purchase cost as well as transmission charges.

Table 9: Rebate on Power Purchase Cost for FY 2016-17 (Rs. Crore)

S. No.	Particulars	Actual
1	Gross Power Purchase Cost (applicable for Rebate)	735.48
2	Rebate towards Power Purchase cost	14.71
3	Total Transmission Cost	66.47
4	Rebate towards Transmission charges	1.33

2.9 Total Power Purchase Cost for True-up

2.9.1 NDMC submits the trued up power purchase cost as below:

Table 10: Total Power Purchase Cost for FY 2016-17 (Rs. Crore)

Sl. No.	Particulars	Approved in Tariff Order for 2015-16	Actual
1	Gross Power Purchase Cost	1,146.83	769.18
2	Cost of Short term and Renewable Purchase		
3	Less Revenue from Sale of Power	266.48	33.70
4	Rebate on Power Purchase Cost	22.72	14.71
5	Net Power Purchase Cost	857.64	720.77
6	Interstate Transmission Charges	18.56	27.00
7	Intrastate Transmission Charges including SLDC	51.75	39.47
8	Total Transmission Charges	70.31	66.47

Sl. No.	Particulars	Approved in Tariff Order for 2015-16	Actual
9	Rebate on Transmission Charges	1.43	1.33
10	Net Transmission Charges	68.88	65.14
11	Total Power Purchase Cost for True-up	926.53	785.91

2.9.2 NDMC prays to the Hon'ble Commission to allow the power purchase cost of Rs. 785.91Crore.

2.10 Operation and Maintenance Expenses

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

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

2.10.2 **Employee Expenses** comprises of Salaries, dearness allowances, Leave Travel Assistance, Earned Leave Encashment, Other allowances & Relief bonus and Honorarium/Overtime. The impact of actual pay revision has been provided in 2016-17 and shown in the appropriate formats. NDMC requests the Hon'ble Commission to kindly consider the formats and approve the actual employee expenses for 2016-17.

2.10.3 **Administrative and General Expenses** mainly comprises of rents, telephone and other communication expenses, professional charges, conveyance and travelling allowances, other debits.

2.10.4 **Repair 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. For 2016-17, in the absence of any specific order for the year, the normative R &M expenses for the year have been considered at the same level as approved by the Commission for 2014-15 i.e. Rs 55.83 crore.

2.10.5 NDMC submits its O&M Expenses as same as the approved expenses and prays to the commission to approve the same.

Table 11: O&M Expenses for FY 2016-17 (Rs. Crore)

Sl. No.	Particulars	Approved in Tariff Order for 2015-16	Actual
1	Employee Expenses		219.52
2	A&G Expenses		10.24
3	R&M Expenses		55.83
4	Gross O&M Expenses	171.80*	
5	Efficiency Factor	4.00%	-
6	Less: Efficiency Improvement	6.87	-
7	Net O&M Expenses	164.92	285.59

*without considering the impact of pay revision.

2.11 Administrative and Civil Engineering Department Expenses

2.11.1 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 truing up process at the end of the year....."

2.11.2 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

2.11.3 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"

2.11.4 NDMC submits the Administrative Department expenses for FY 2016-17 as under.

Table 12: Administrative and Civil Engineering Department Expenses for FY 2016-17 (Rs. Crore)

Sl. No.	Particulars	Actual
1	Civil Engineering Department Expenses	10.00
2	Administrative Department Expenses	35.37
3	Total Administrative and Civil Engineering Expense	45.37

2.12 Non-Tariff Income

2.12.1 NDMC has considered the non-tariff income from the sale of electricity as per actuals of FY 2016-17. NDMC requests the Hon'ble Commission to approve Non-Tariff Income of Rs. 2.13 Crore for FY 2016-17.

Table 13: Non-Tariff Income for FY 2016-17 (Rs. Crore)

Sl. No.	Particulars	Approved in Tariff Order for 2015-16	Actual
12	Non-Tariff income	7.58	2.13

2.13 Capital Expenditure and Capitalisation

2.13.1 NDMC had appointed SBI Caps as external consultant to determine the actual assets and balance sheet of the Electricity Distribution Business Unit. Based on the report and subsequent capitalisation of assets, NDMC submits the following details for Capital Expenditure and Capitalisation for 2016-17.

Table 14: Gross Fixed Assets for FY 2016-17 (Rs. Crore)

Sl. No.	Particulars	Approved in Tariff Order for 2015-16	Actual
1	Opening GFA	484.13	922.65
2	Capitalisation	15.29	2.94
3	Closing GFA	499.42	925.59
4	Average GFA	491.78	924.12

2.14 Financing of New Investments

2.14.1 NDMC has been financing the new assets capitalized through its internal resources and has not taken any debt for the same. Therefore, the Equity and Debt are determined at normative basis as per normative Debt-Equity ratio of 70%: 30%, as shown in the table below:

Table 15: Financing of New Investment for FY 2016-17 (Rs. Crore)

Sl. No.	Particulars	Actual	Remarks
1	Capitalisation	2.94	
2	Consumers Contribution		
3	Balance Capitalisation	2.94	
4	Equity	0.88	30% x (3)
5	Debt	2.06	70% x (3)

2.15 Consumers Contribution

2.15.1 NDMC submits before the Hon'ble Commission that, during FY 2016-17, it has not resorted to funding through raising consumer contribution and prays to the Hon'ble Commission to approve the consumer contribution as below:

Table 16: Consumer Contribution for FY 2015-16 (Rs. Crore)

Sl. No.	Particulars	Actual
1	Opening Balance	16.14
2	Additions During the year	-
3	Closing Balance	16.14
4	Average Consumers Contribution	16.14

2.16 Depreciation

2.16.1 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. Depreciation has been computed at 3.60% of average GFA during the year. The table below summarizes the depreciation claimed by NDMC.

Table 17: Depreciation for FY 2016-17 (Rs. Crore)

Sl. No.	Particulars	Approved in Tariff Order for 2015-16	Actual
1	Average GFA	491.78	924.12
2	Average Consumer Contribution	0.00	16.14
3	Average Assets Net of Consumer Contribution	491.78	907.98
4	Average Depreciation Rate	3.60%	3.60%
5	Depreciation	17.70	32.69

2.17 Cumulative Depreciation

2.17.1 NDMC submits the accumulated depreciation till FY 2016-17 as below.

Table 18: Cumulative Depreciation till FY 2016-17 (Rs. Crore)

Sl. No.	Particulars	Actual
1	Opening Balance of Cumulative Depreciation	502.55
2	Addition during the year FY2016-17	32.69
3	Closing Balance of Cumulative Depreciation	535.24

2.18 Utilization of Depreciation

2.18.1 NDMC submits to the Hon'ble Commission that no portion of the depreciation has been used to repay any actual debt in FY 2016-17.

Table 19: Utilization of Depreciation for FY 2016-17

Sl. No.	Particulars	Actual
1	Depreciation for FY 2016-17	32.69
2	Depreciation utilized for Debt repayment in FY 2016-17	Nil

2.19 Working Capital

2.19.1 The Regulation 5.14 and 5.15 of the DERC Wheeling and Retail Tariff Regulations, 2011 specifies that working capital shall consist of:

For wheeling business

a) *Receivables for two months of wheeling charges*

For Retail supply business

- i. Receivables for two months of revenue from sale of electricity*
- ii. Less: Power purchase costs for one month*
- iii. Less: Transmission charges for one month, and*
- iv. Less: Wheeling charges for two months*

2.19.2 NDMC has calculated the Working Capital requirements on normative basis as stipulated by the methodology specified in the DERC Wheeling and Retail Tariff Regulations, 2011. NDMC requests the Hon'ble Commission to approve the Working Capital Requirements as per the following:

Table 20: Determination of Working Capital for FY 2016-17 (Rs. Crore)

Sl. No.	Particulars	Approved in Tariff Order for 2015-16	Actual
1	Receivables from sale of Electricity	1,123.39	1213.15
	Receivables Equivalent to 2 months	187.23	202.19
2	Net Power Purchase Expense (Including Transmission, SLDC ,RPO and normative rebate)	926.53	785.91
4	1/12th of Power Purchase Expense	77.21	65.49
5	Total Working Capital	110.02	136.70
6	Less: Opening Balance of Working Capital	115.00	113.14
7	Change in Working Capital	(4.98)	23.56

2.20 Regulated Rate Base

2.20.1 The Regulated Rate Base has been computed below for FY 2016-17 based on the DERC Wheeling and Retail Tariff Regulations, 2011 and submitted to the Hon'ble Commission for approval.

Table 21: Regulated Rate Base for FY 2016-17 (Rs. Crore)

Sl. No.	Particulars	Approved in Tariff Order for 2015-16	Actual for 2016-17
1	RRB - Base Year		
A	Opening Balance of GFA	484.13	922.65
B	Opening Balance of Working Capital	115.00	113.14
C	Opening Balance of Accumulated Depreciation	372.38	502.55
D	Opening balance of Accumulated Consumer Contribution (in proportion of OCFA to total OCFA + CWIP + Stores)	-	16.14
E	(A+B)-(C+D) i.e., RRB opening	226.75	517.10
2	RRB - for the year		
F	Investments in capital expenditure during the year	15.29	2.94
G	Depreciation for the year	17.70	32.69
H	Consumer Contribution, Grants, etc for the year	-	-
I	Fixed asset retirement/Decapitalisation applicable		
J	Change in Working Capital	(4.98)	23.56
K	Change in RRB During 2016-17 [(F-G-H) / 2 + J]	(6.19)	8.69
3	RRB Opening Balance	226.75	517.10
	RRB for the year	(6.19)	8.69
	RRB Closing (E+F+H-G)	219.36	525.79
4	Opening in Regulated Rate Base (RRB) (i)	226.75	517.10
	Change in RRB	(6.19)	8.69
	Regulated Rate Base (RRB) (i)	220.57	525.79

2.21 Return on Capital Employed

2.21.1 NDMC submits before the Hon'ble Commission that capital expenditure incurred by it for creation of assets has been majorly 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 DERC Wheeling and Retail Tariff Regulations, 2011. Rate of Return on the Debt is considered at the same level as approved by the Hon'ble Commission for 2015-16. Detailed calculation of Weighted average cost of capital (WACC) leading up to estimation of RoCE is shown in the table below:

Table 22: Return on Capital Employed for FY 2016-17 (Rs. Crore)

Sl. No.	Description	Approved in Tariff Order for 2015-16	Actual
1	RRB	220.57	525.79
2	Working Capital Loan		136.70
3	Net Regulated Rate Base (RRB)		389.09
4	Equity Rate	16%	16%
5	Debt Rate	11.50%	11.50%
6	Equity %	30%	30%
7	Debt %	70%	70%
8	WACC	12.85%	12.50%
9	Return on Capital Employed (ROCE)	28.34	65.72

2.22 Income Tax

2.22.1 The Petitioner submits that NDMC is exempted from paying the Income tax, therefore claim for such tax liabilities has not been proposed in the petition.

2.23 Aggregate Revenue Requirement for Truing up for FY 2016-17

2.23.1 NDMC submits before the Hon'ble Commission the Aggregate Revenue Requirement for FY 2016-17.

Table 23: Trued up ARR for FY 2016-17 (Rs. Crore)

Sl. No.	Description	Approved in Tariff Order	Actual
1	Cost of power purchase, including T&D Losses	926.53	735.48
2	Inter-State Transmission charges		27.00

Sl. No.	Description	Approved in Tariff Order	Actual
3	Intra-state Transmission charges (Including SLDC charges)		39.47
	Rebate on Timely payments		-16.04
4	Net Operation & Maintenance (O&M)	164.92	285.59
5	Depreciation	17.70	32.69
6	Administrative Dept. & Civil Eng. Dept.	0.00	45.37
7	RoCE	28.34	65.72
8	Income Tax	0.00	-
9	Less: Non-Tariff Income	7.58	2.13
10	Aggregate Revenue Requirement	1,129.92	1,213.15

2.23.2 The Hon'ble Commission is requested to approve and allow the Aggregate Revenue Requirement of Rs. 1213.15 Crore as presented above, as against the Approved Aggregate Revenue Requirement of Rs. 1,129.92 Crore.

2.24 Revenue (Gap)/Surplus

2.24.1 The overall gap based on the actual expenses and revenue during FY 2016-17 is Rs. 122 Crore. The same is provided in the table below:

Table 24: Revenue Gap/ Surplus for FY 2016-17 (Rs. Crore)

Sl. No.	Particulars	Actual
1	Aggregate Revenue Requirement, FY 2016-17	1,213.15
2	Revenue Available Towards ARR	1,091.15
3	Revenue (Gap)/Surplus	-122.00

3 Revised ARR for FY 2017-18

3.1 Energy Sales

3.1.1 NDMC provides the projected Category-wise energy sales data for FY 2017-18 in the table below. The projected sales for FY 2017-18 are ~1404.96 MU.

Table 25: Category-wise Energy Sales for FY 2017-18 (MU)

Sl. No.	Consumer Category	Approved in Tariff Order 2017-18	Energy Sales (Provisional)
1	Domestic	252.06	267.32
2	Non-Domestic Low Tension (up to 140 kW/150 kVA)	256.18	274.43
3	Mixed Load*	767.98	782.77
4	Small Industrial Power	0.06	0.05
5	Public Lighting	7.40	7.78
6	Others	11.55	11.14
7	DMRC	47.22	60.89
8	Total	1342.45	1404.96

*Mixed Load includes Non-Domestic LT above 140 kW/150 kVA and Non-Domestic HT

3.2 Revenue from Energy Sales

3.2.1 The projected annualised revenue to be billed for the FY 2017-18 against the projected sales by the utility is consolidated from the Form 2.1(a) and is submitted as below:

Table 26: Revenue from Sale of Power for FY 2017-18 (Rs. Crore)

Sl. No.	Category	Total Revenue	
		Approved in Tariff Order 2017-18	Projected^
1	Domestic	96.77	160.46
2	Non-Domestic Low Tension (up to 140 kW/150 kVA)	584.01	258.11
3	Non-domestic High Tension	*	714.52
4	Small Industrial Power	0.05	0.04
5	Public Lighting	5.4	6.07
6	Others	13.87	9.55

Sl. No.	Category	Total Revenue	
		Approved in Tariff Order 2017-18	Projected^
7	DMRC	28.92	38.00
	Total	946.00	1186.74

*not provided in order ^excluding Etax.

3.2.2 NDMC humbly pleads before the Hon'ble Commission that the organisation is not registered under Company Act and thus the reports are not audited by Chartered Accountant. All the reports are audited first internally and subsequently by CAG. Owing to this reason NDMC will not be able to furnish Auditor's Certificate and requests the Hon'ble Commission to accept the submission without the Auditor's Certificate.

3.3 Distribution Loss

3.3.1 NDMC submits its Distribution Losses for FY 2017-18 as below:

Table 27: Distribution Loss for FY 2017-18

Sl. No.	Particulars	Approved in Tariff Order 2017-18	Provisional
1	Distribution Loss target	10.30%	10.30%

3.3.2 NDMC submits that the revenue collected and revenue billed for FY 2017-18 as below:

Table 28: Revenue Realised and Revenue Collected for FY 2017-18

Sl. No.	Item	Provisional
1	Revenue Billed (Rs. Crore)*	1,241.91
2	Revenue Realised (Rs. Crore)	1,217.07
3	Collection Efficiency (%)	98.00%

*excluding E.Tax and including surcharge

3.3.3 The Revenue Billed includes Fixed Charge, Energy Charges, Other Charges and PPAC Amount Billed. The details of projected category wise revenue billed by NDMC is provided in the appropriate formats. The AT&C Losses are determined

on revenue billed and collected net of Electricity Tax.

- 3.3.4 NDMC has projected an overall distribution loss of 10.30% as approved by the Hon'ble Commission. NDMC submits the detailed calculation of its AT&C Losses for FY 2017-18 as below.

Table 29: Determination of AT&C Loss for FY 2017-18

Sl. No.	Particulars	Unit	Provisional
1	Energy Input	MU	1,566.29
2	Units Billed	MU	1,404.96
3	Amount Billed	Rs. Crore	1,241.91
4	Average Billing Rate	Rs./unit	8.84
5	Distribution Loss	%	10.30%
6	Amount Collected	Rs. Crore	1,217.07
7	Collection Efficiency	%	98.00%
8	Units Realized	MU	1,376.86
9	AT&C Loss Level	%	12.09%

3.4 Power Purchase Quantum

- 3.4.1 NDMC has allocations of power from Dadri TPS, Badarpur TPS and Pragati Station. The Hon'ble Commission is requested to allow the actual gross power purchase of 1566.29 MU for FY 2017-18.

Table 30: Power Purchase Quantum for FY 2017-18 (MU)

Sl. No.	Particulars	Provisional
1	Power Purchase from Central Stations	382.22
2	Interstate Transmission Losses	13.38
3	Net Power Purchase from Central Stations	368.85
4	Power Purchase from State Stations	1,095.98
5	Power Purchase from Short Term Sources	395.32
6	Power Purchase from Renewable Sources	10.26
7	Gross Power Purchase	1,870.40
8	Intra State Transmission Loss	12.38
9	Net Power Available at NDMC Periphery	1,858.02

Sl. No.	Particulars	Provisional
10	Sale of Surplus Power	291.73
11	Net Power available for Retail sales	1,566.29

3.4.2 Dadri TPS is the central power station having power allocations to NDMC. Further, NDMC has drawn power from state stations viz. Badarpur TPS and Pragati Power Stations (Pragati I and CCGT Bawana). NDMC also resorted to short-term power purchase from IEX, PXIL and other bilateral and banking agreements. The average interstate transmission loss has been considered as 3.50% and intrastate loss 0.85%.

3.4.3 **Allocation of Power from GT-** NDMC prays before the Hon'ble Commission that it had been allocated power from GT in 2017-18. It has been observed in the past that gas based power plants are not competent to serve reliable power especially in summer months on account of shortage of gas. It needs to be appreciated that NDMC is catering to VVIP areas in its area of operations including Parliament House, Supreme Court, offices of various political parties for which reliability of power is paramount. There is no margin for any power cuts in case power is not available from allocated sources. Accordingly, in such situations, NDMC will have to overdraw significantly from the grid leading to violations of grid code and imbalance in utility operations in Delhi. It is the humble submission of NDMC that it is inclined to buy power from renewable sources to meet its power requirement and would therefore request the Hon'ble Commission to not consider any allocation of power from this source in 2017-18 and ensuing year as well. However, in case the Hon'ble Commission envisages additional allocation of any capacity to NDMC, the same should be done from the hydro sources available for Delhi discoms.

3.5 Short Term Power Purchase

3.5.1 As detailed above, NDMC requests the Hon'ble Commission to approve the Short Term Power Purchase for FY17-18 as presented below

Table 31: Short Term Power Purchase, RE Quantum for FY 2017-18 (MU)

Sl. No.	Particulars	Provisional
1	Bilateral	255.60

Sl. No.	Particulars	Provisional
2	IEX	129.46
3	RE Sources	10.26
4	Total	395.32

*RE quantum is long term

3.6 Short Term Sales

3.6.1 NDMC requests the Hon'ble Commission to approve the Short Term Power Sales for FY 2017-18 as presented below:

Table 32: Short Term Power Sale Quantum for FY 2017-18 (MU)

Sl. No.	Particulars	Provisional
1	IEX	229.91
2	UI (net of purchase)	66.88
3	Total	296.79

3.7 Power Purchase from Long-Term Sources

3.7.1 NDMC submits the power purchase quantum from long-term sources as tabulated below:

Table 33: Power Purchase from Long Term Sources (MU)

Sl. No.	Particulars	Provisional
	Central Generating Stations	
1	Dadri TPS	382.22
	State Generating Stations	
2	Badarpur TPS	344.03
3	Pragati I	578.03
4	Pragati III- CCGT Bawana	184.17
5	Total	1,488.46

3.8 Cost of Power Purchase

3.8.1 NDMC submits the cost of power purchase for the year FY2017-18 as below and prays to the Hon'ble Commission to approve the cost of Rs. 758.88 Crore.

Table 34: Cost of Power Purchase from Long Term Sources

Sl. No.	Particulars	Power Purchase Quantum (MU)	Power Purchase Cost (Rs. Crore)	Average Rate (Rs./kWh)
	Central Generating Stations			
1	Dadri TPS	382.22	186.52	5.22
	State Generating Stations			
2	Badarpur TPS	344.03	159.63	4.64
3	Pragati I	578.03	227.97	3.94
4	Pragati III- CCGT Bawana	184.17	135.74	7.37
5	Total	1,488.46	758.88	4.77

3.9 Short Term Power Purchase

3.9.1 NDMC prays to the Hon'ble Commission to approve the cost of Short Term Power Purchase as below:

Table 35: Short term , RE (long term) Power Purchase and Sale from Short Term Sources

Sl. No.	Particulars	Power Quantum	Amount (Rs. Crore)	Average Rate (Rs./kWh)
1	Short-Term Power Purchase	385.07	180.83	4.70
2	Power Purchase from RE Sources	10.26	7.18	7.00
3	Short-Term Power Sale	-229.91	-66.41	2.89

3.10 Rebate on Power Purchase and Transmission Charges

3.10.1 NDMC submits the following details for the rebates received by the utility towards its power purchase cost as well as transmission charges.

Table 36: Rebate on Power Purchase Cost for FY 2017-18 (Rs. Crore)

Sl. No.	Particulars	Provisional
1	Gross Power Purchase Cost (applicable for Rebate)	818.74
2	Rebate towards Power Purchase cost	16.37

Sl. No.	Particulars	Provisional
3	Total Transmission Cost	71.56
4	Rebate towards Transmission charges	1.43

3.11 Total Power Purchase Cost for True-up

3.11.1 NDMC submits the trued up power purchase cost as below

Table 37: Total Power Purchase Cost for FY 2017-18 (Rs. Crore)

Sl. No.	Particulars	Provisional
1	Gross Power Purchase Cost	897.85
2	Cost of Short term and Renewable Power Purchase	
3	Revenue from Sale of Power	79.12
4	Rebate on Power Purchase Cost	16.37
5	Net Power Purchase Cost	802.36
6	Interstate Transmission Charges	29.07
7	Intrastate Transmission Charges including SLDC	42.49
8	Total Transmission Charges	71.56
9	Rebate on Transmission Charges	1.43
10	Net Transmission Charges	70.13
11	Total Power Purchase Cost	872.49

3.11.2 NDMC prays to the Hon'ble Commission to allow the overall power purchase cost of Rs. 872.49 Crore.

3.12 Operation and Maintenance Expenses

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

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

3.12.2 **Employee Expenses** comprises of Salaries, dearness allowances, Leave Travel Assistance, Earned Leave Encashment, Other allowances & Relief bonus and

Honorarium/Overtime. As mentioned in the previous chapter, NDMC has considered the impact of pay revision in 2016-17. For 2017-18, the Petitioner has considered such expenses as the base expenses. However, NDMC has not considered the impact of gratuity in 2017-18 and the same shall be submitted at the time of final truing up for 2017-18.

3.12.3 **Administrative and General Expenses** mainly comprises of rents, telephone and other communication expenses, professional charges, conveyance and travelling allowances, other debits.

3.12.4 **Repair 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. For 2017-18, the normative expenses considered in 2016-17 have been escalated to derive the normative expenses for 2017-18.

3.12.5 In 2016-17, the overall O & M expenses have been Rs 285.59 crore. Based on the rationale submitted above, NDMC has escalated the expenses for 2016-17 at an escalation factor of 5.61% (escalation factor used by the Hon'ble Commission in the tariff order for 2017-18) to derive the O & M expenses on a normative basis for 2017-18. Any revision in O & M expenses for 2017-18 will be submitted by the Petitioner at the time of final true-up.

Table 38: O&M Expenses for FY 2017-18 (Rs. Crore)

Sl. No.	Particulars	Approved in Tariff Order 2017-18	Provisional
1	Gross O&M Expenses	183.95*	216.25

*does not consider the impact of pay revision

3.13 Administrative and Civil Engineering Department Expenses

3.13.1 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 truing up process at the end of the year.....”

3.13.2 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

3.13.3 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”

3.13.4 NDMC submits the Administrative department expenses for FY 2017-18 the same as approved by the Hon’ble Commission through the tariff order for FY 2017-18.

Table 39: Administrative and Civil Engineering Department Expenses for FY 2017-18 (Rs. Crore)

Sl. No.	Particulars	Provisional
1	Civil Engineering Department Expenses	10.00
2	Administrative Department Expenses	35.37
3	Total Administrative and Civil Engineering Expense	45.37

3.14 Non-Tariff Income

3.14.1 NDMC has considered the non-tariff income from the sale of electricity as per provisional figures of FY 2017-18. NDMC request the Hon’ble Commission to approve Non-Tariff Income of Rs. 2.24 Crore for FY 2017-18.

3.15 Capital Expenditure and Capitalisation

3.15.1 NDMC prays to the Commission to approve the Capitalization and GFA schedule as follows for FY 2017-18. NDMC submits the following details for Capital Expenditure and Capitalisation

Table 40: Provisional GFA for FY 2017-18 (Rs. Crore)

Sl. No.	Particulars	Provisional
1	Opening GFA	925.59
2	Capitalisation	152.08
3	Closing GFA	1077.67
4	Average GFA	1001.63

3.16 Financing of New Investment

3.16.1 NDMC submits the financing of new assets capitalized as provided in the table below. The Equity and Debt are determined at normative basis as per normative Debt-Equity ratio of 70%:30%.

Table 41: Financing of New Investment for FY 2017-18 (Rs. Crore)

Sl. No.	Particulars	Provisional	Remarks
1	Capitalisation	152.08	
2	Consumers Contribution	0.00	
3	Balance Capitalisation	152.08	
4	Equity	45.62	30% x (3)
5	Debt	106.46	70% x (3)

3.17 Consumers Contribution

3.17.1 NDMC submits before the Hon'ble commission that it has not resorted to funding through raising consumer contribution and prays to the Hon'ble Commission to approve the consumer contribution as below.

Table 42: Consumer Contribution for FY 2017-18 (Rs. Crore)

Sl. No.	Particulars	Provisional
1	Opening Balance	16.14
2	Additions During the year	0.00
3	Closing Balance	16.14
4	Average Consumers Contribution	16.14

3.18 Depreciation

3.18.1 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 3.60% of average GFA during the year. The Table below summarizes the depreciation claimed by NDMC.

Table 48: Depreciation for FY 2017-18 (Rs. Crore)

Sl. No	Particulars	Provisional
1	Average GFA	1001.63
2	Average Consumer Contribution	16.14
3	Average Assets Net of Consumer Contribution	985.49
4	Average Depreciation Rate (%)	3.6%
5	Depreciation	35.48

3.19 Cumulative Depreciation

3.19.1 NDMC submits the accumulated depreciation till FY18 as below.

Table 49: Cumulative Depreciation till FY 2017-18 (Rs. Crore)

Sl. No.	Particulars	Provisional
1	Opening Balance of Cumulative Depreciation	535.24
2	Addition during the year FY 2017-18	35.48
3	Closing Balance of Cumulative Depreciation	570.71

3.20 Utilization of Depreciation

Table 50: Utilization of Depreciation for FY 2017-18 (Rs. Crore)

Sl. No.	Particulars	Provisional
1	Depreciation for FY2017-18	35.48
2	Depreciation utilized for Debt repayment in FY 2017-18	-

3.20.1 NDMC submits to the Hon'ble Commission that no portion of the depreciation

has been used to repay debts in FY 2017-18.

3.21 Working Capital

3.21.1 The DERC Tariff Regulation, 2017 specified the following for computation of Working Capital.

“84.

...

(4) *Distribution Licensee as follows:*

(i) *Working capital for wheeling business of electricity shall consist of ARR for two months of Wheeling charges.*

(ii) *Working capital for Retail Supply business of electricity shall consist of*

(a) *ARR for two months for retail supply business of electricity;*

(b) *Less: Net Power Purchase cost for one month;*

(c) *Less: Transmission charges for one month.*

3.21.2 NDMC has calculated the Working Capital requirements on normative basis as stipulated by the methodology specified in the DERC Tariff Regulations, 2017. NDMC requests the Hon'ble Commission to approve the Working Capital Requirements as per the following.

Table 51: Determination of Working Capital for FY 2017-18 (Rs. Crore)

Sl. No	Particulars	Approved in Tariff Order 2017-18	Provisional
1	Receivables from Sale of Power	1,342.45	1,223.25
2	Receivables Equivalent to 2 months	223.74	203.87
3	Total Power Purchase Expense	821.63	872.49
4	1/12th of Power Purchase Expense	68.47	72.71
5	Total Working Capital	155.27	131.17
6	Opening WC	114.01	136.70
7	Change in Working Capital	41.26	-5.53

3.22 Regulated Rate Base

3.22.1 The Regulated Rate Base has been computed below for FY 2017-18 based on the

DERC Tariff Regulations, 2017 and submitted to the Hon'ble Commission for approval.

Table 52: Regulated Rate Base for FY 2017-18 (Rs. Crore)

Sl. No.	Particulars	Approved in the Tariff Order 2017-18	Provisional
1	RRB - Base Year		
A	Opening Balance of OCFA	532.70	925.59
B	Opening Balance of Working Capital	114.01	136.70
C	Opening Balance of Accumulated Depreciation	408.98	535.24
D	Opening balance of Accumulated Consumer Contribution (in proportion of OCFA to total OCFA + CWIP + Stores)	7.80	16.14
E	(A+B)-(C+D) i.e., RRB opening		510.91
2	RRB - for the year		
F	Investments in capital expenditure during the year	152.08	152.08
G	Depreciation for the year	21.63	35.48
H	Consumer Contribution, Grants, etc for the year		-
I	Fixed asset retirement/Decapitalisation applicable		
J	Change in Working Capital	41.26	-5.53
	Change in RRB during FY 2017-18 ((F-G-H)/2+J)		52.77
3	RRB Opening Balance	229.93	510.91
	RRB for the year	106.49	52.77
	RRB Closing Balance (E+F+H-G)		563.68
4	Opening in Regulated Rate Base (RRB) (i)		510.91
	Change in RRB		52.77
	Regulated Rate Base (RRB) (i)	336.41	563.68

3.23 Return on Capital Employed

3.23.1 NDMC submits before the Hon'ble commission that capital expenditure incurred by it for creation of assets has been majorly 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 FY 2017-18 is kept at 16% as per the DERC Tariff Regulations, 2017. Rate of Return on the Debt for FY 2017-18 is kept at 8.10% as approved by the Hon'ble Commission and the same will be considered at the time of final true-up for 2017-18. Detailed calculation of Weighted average cost of capital (WACC) leading up to estimation of RoCE is shown in the table below:

Table 53: Return on Capital Employed for FY 2017-18 (Rs. Crore)

Sl. No	Description	Approved in Tariff Order 2017-18	Provisional
1	RRB (i)	336.41	563.68
2	Working Capital	155.27	131.17
3	RRBi Excluding Working Capital	181.14	432.51
4	Equity Rate (%)	16.00%	16%
5	Debt Rate (%)	8.10%	8.10%
6	Weighted Average Cost of Capital (WACC)	9.38%	9.92%
7	Return on Capital Employed (ROCE)	31.54	55.91

3.24 Income Tax

No claim towards income tax has been proposed since NDMC is expected from paying the tax.

3.25 Aggregate Revenue Requirement for Truing up for FY2017-18

3.25.1 NDMC submits before the Hon'ble Commission the Aggregate Revenue Requirement for FY 2017-18.

Table 55: Provisional True-up of ARR for FY 2017-18 (Rs. Crore)

Sl. No.	Particulars	Approved in Tariff Order 2017-18	Provisional
1	Net Power Purchase Cost	821.63	818.74
2	Inter-State Transmission charges		29.07
3	Intra-state Transmission charges (including SLDC Charges)		42.49
	Rebate on timely payments		-17.81
5	Operation & Maintenance (O&M)	183.95	216.25
6	Depreciation	21.63	35.48
7	Administrative Dept. & Civil Engg. Dept		45.37
8	RoCE	31.54	55.91
9	Income Tax		-
	Less: Non-Tariff Income	27.50	2.24
10	Aggregate Revenue Requirement	1031.26	1,223.25

3.25.2 The Hon'ble Commission is requested to allow and approve the Aggregate Revenue Requirement as submitted in the table above.

3.26 Revenue (Gap)/Surplus

3.26.1 NDMC submits that the overall gap based on the provisional expenses and revenue during FY 2017-18 is Rs. 36.51 Crore. The same is provided in the table below:

Table 56: Revenue Gap/ Surplus for FY 2017-18 (Rs. Crore)

Sl. No.	Particulars	Provisional
1	Aggregate Revenue Requirement, FY 2017-18	1,223.25
2	Revenue Available Towards ARR	1,186.74
3	Revenue (Gap)/Surplus	-36.51

4 Aggregate Revenue Requirement for FY 2018-19

4.1 Energy Sales

4.1.1 The DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017 (referred to from here onwards as DERC Tariff Regulations, 2017) stipulates the Sales projections to be made as follows

“5...

(7) Sales Forecast for each consumer category and sub-categories based on following factors:

- a) Category wise growth in No. of Consumers,
- b) Category wise growth in Sanctioned Load/Contract Demand (MW),
- c) Economic Cycle (boom, recession, Government policies etc.),
- d) Impact of Open Access (MU), Net Metering (MU), Demand Side Management measures (MU) etc.,
- e) Any other factor impacting the sales;”

4.1.2 As part of its submission in Petition for approval of Tariff for 2017-18, NDMC had submitted the category wise growth rate for different time period as shown in the table below:

Table 43: Historical Escalation Rates for Electricity Sales

Sl. No.	Consumer Category	Last 5 Years	Last 3 years
1	Domestic	0.33%	-0.90%
2	Non-Domestic Low Tension (up to 140 kW/150 kVA)	-0.01%	1.71%
3	Mixed Load*	1.21%	-0.19%
4	Small Industrial Power	-35.40%	-49.29%
5	Public Lighting	-12.16%	-3.73%
6	Others	9.17%	-25.14%
7	DMRC	18.34%	4.64%

*Mixed Load includes Non-Domestic LT above 140 kW/150 kVA and Non-Domestic HT

4.1.3 The Petitioner submits that while there had been a reduction in consumption in certain categories especially domestic and mixed load categories on account of

reconstruction of certain government buildings especially in Kidwai Nagar (East), in the past, however the reducing trend has now stabilised and the consumption in FY 2017-18 has grown to increase by around 6% in comparison to the consumption in 2016-17. However, NDMC does not envisage further growth in demand as some of the high rise buildings are like to be put to renovation in the ensuing year. Accordingly, the following sales projections have been considered for FY 2018-19.

Table 44: Category-wise Energy Sales for FY 2018-19 (MU)

Consumer Category	2016-17	2017-18	YOY growth rate FY 2017-18 over FY 2016-17	Escalation rate used for Projection sales in FY 19	FY 2018-19 Projections
Domestic	256.22	267.32	4.33%	2%	272.66
Non Domestic	994.25	1057.19	6.33%		1078.34
Industrial	0.05	0.05	1.45%		0.05
Public Lighting	8.58	7.78	-9.37%		7.93
DMRC supply Voltage wise	41.84	60.89	45.52%		62.11
Temporary Supply	11.51	11.74	-		11.97
Total	1312.44	1404.96	6.15%		1433.06

**Mixed Load includes Non-Domestic LT above 140 kW/ 150 kVA and Non-Domestic HT*

4.1.4 The aforesaid escalation factors have been applied on the estimated sales of FY 2017-18. Accordingly, the projected sales for FY 2018-19 have been considered to be ~1433 MU

4.1.5 The estimated category wise number of consumers and connected load as submitted in the business plan submissions is as below.

4.2 Collection Efficiency

4.2.1 The DERC Tariff Regulations, 2017 specifies:

"5...

(11) Collection Efficiency shall be measured as ratio of total revenue realised to the total revenue billed in the same year:

Provided that Revenue Realised or Revenue Billed on account of electricity duty, late payment surcharge, any other surcharge shall be excluded from the computation of Collection Efficiency; “

4.2.2 NDMC has considered 99% collection efficiency for FY 2018-19 and the same has been considered for estimation of AT&C Losses.

4.3 Distribution Loss

4.3.1 The DERC Tariff Regulations, 2017 specifies:

“5...

(8) Distribution Loss & Collection Efficiency trajectory consisting of:

- a) Total and voltage-wise distribution losses (%) along with the basis thereof,*
- b) Total and category-wise revenue collection,*
- c) AT&C loss level based upon past trends, sales growth and any other factors;*

...

(12) Distribution Loss shall be measured as the difference between the Energy units input into the distribution system for sale to all its consumer(s) and the total Energy units billed in its Licensed area in the same year;

4.3.2 NDMC has envisaged a distribution loss of 10% considering that capital expenditure is being incurred towards strengthening of the distribution system. Considering that incremental loss reduction would be capex intensive and difficult to achieve, the distribution loss has been proposed as 10%

Table 45: Distribution Loss for FY 2018-19

Sl. No.	Particulars	FY 2018-19
1	Distribution Loss	10%

4.4 AT&C Loss

4.4.1 The DERC Tariff Regulations, 2017 specifies

“5...

(9) The AT&C Loss shall be the relationship between Distribution Loss and Collection Efficiency computed as per the following formula:

$$AT\&C\ Loss = [1 - (1 - Distribution\ Loss) * Collection\ Efficiency]] * 100$$

where,
AT&C Loss, Distribution Loss and Collection Efficiency are in (%) percentages”

4.4.2 NDMC submits that it has projected a constant collection efficiency of 99% for the FY 2018-19, as achieving 100% collection efficiency in the retail supply business is unlikely. Therefore, based on the projected distribution loss and 99% collection efficiency, the AT&C Loss for FY 2018-19 is tabulated in the table below:

Table 46: AT&C Loss for FY 2018-19

Sl. No.	Particulars	FY 2018-19
1	Distribution Loss (%)	10.00%
2	Collection Efficiency (%)	99.00%
3	AT&C losses (%)	10.90%

4.5 Energy Requirement

4.5.1 Based on the projected Energy Sales and Distribution Loss for FY 2018-19, the energy requirement for NDMC is projected as under:

Table 47: Energy Requirement Projections for FY 2018-19

Sl. No.	Particulars	FY 2018-19
	Energy Requirement	
1	Energy Sales (MU)	1433.06
2	Distribution Loss (%)	10.00%
3	Distribution Loss (MU)	159.23
4	Energy Required at Distribution Periphery (MU)	1592.33

4.6 Energy Availability

4.6.1 The energy requirement for NDMC is projected to be met from various sources namely;

- a) Power Purchase from NTPC- Dadri Power Station.
- b) Power Purchase from plants located in Delhi- Badarpur Thermal Power Station, Pragati I and Pragati III (Bawana), Delhi MSW Solutions Ltd. and EDWPCL (3.77% of capacity).

- c) The energy projections of these plants have been considered based on past trends. Further, an escalation factor of 4% has been considered to project the corresponding fixed and energy charges for such plants. As submitted in the previous section, the Petitioner reiterates that the Hon'ble commission may kindly consider the submissions of NDMC and no allocation from GT be made to NDMC in 2018-19.
- d) Sale / Purchase from Short-Term, Bilateral and Inter-Discom sources.

4.6.2 NDMC's allocation from various power stations from which it sources power is given in the table below:

Table 48: Energy Availability Assumptions

Sl. No.	Power Plant	Total Installed Capacity (MW)	% Share
1	NTPC - Badarpur TPS	705.00	17.73%
2	NTPC - Dadri TPS	840.00	14.88%
3	Pragati Power Corp I	330.00	30.30%
4	PPCL III	1,371.20	7.30%
5	Delhi MSW Solutions*	24.00	5.09%
6	EDWPCL	10	3.77%

* As per DERC's Interim Order dated 29.04.2016 in Petition No. 27/2016

4.6.3 For meeting the supply-demand gap during the peak hours, NDMC projects to rely upon Short-Term, Bilateral and Inter-Discom power purchase. Detailed methodology of projecting the power availability from various sources is detailed below.

4.6.4 Energy availability has shown a substantial rise over the years and this has helped NDMC meet its peak power requirements comfortably. But, the last three years have witnessed a fall in PLF for the generating stations from which NDMC is presently procuring power. This has been taken into account for all projections made for FY 2018-19.

4.6.5 NDMC has considered the availability of power from such sources in the past and has accordingly worked out the expected availability from such stations for 2018-19 the overall estimated quantum of power to be purchased from each of the sources is provided in the appropriate formats and the same may kindly be

approved by the Hon'ble Commission.

- 4.6.6 NDMC is positive that the shortfall in individual months shall be met from the power purchase agreements with Small Hydro Plants during the FY 2018-19. Further, NDMC has also been directed by the Hon'ble Commission to execute PPA with Delhi MSW Solutions Ltd, Bawana in lines with the provisions of Tariff Policy 2016, which mandates all Discoms to procure power from municipal solid waste based power plants at a tariff determined by the appropriate Commission. NDMC also submits that it may resort to other Banking and bilateral arrangements along with Short Term power sources to meet the energy deficits as and when required.
- 4.6.7 **Solar RPO Obligation:** NDMC envisages that Solar power purchase from various sources including MPUVNL and MNRE, will be considered in the ensuing year based on requirements. Procurement from such sources will be sufficient to meet the existing RPO targets specified by the Hon'ble Commission and hence NDMC has not projected any REC purchase for FY 2018-19.
- 4.6.8 NDMC has projected Non-Solar power purchase from various sources including Small Hydro Projects, Delhi MSW Solutions Ltd. and EDWPCL which would be sufficient to meet the existing RPO targets specified by the Hon'ble Commission and hence NDMC has not projected any REC purchase for FY 2018-19. For EDWCPL, the tariff has been considered as approved by the Hon'ble Commission in the tariff order for BYPL for 2015-16. The said tariff has been escalated at 4% per annum to derive the charges for 2018-19. The Petitioner however requests the Hon'ble Commission to approve the charges for such plants based on detailed and updated information as may be filed by such developers.

4.7 Energy Balance

- 4.7.1 The following table shows the projected energy balance arrived for FY 2018-19 after considering the projected sales, AT&C loss levels, transmission losses, power purchase and sale of surplus power.

Table 49: Energy Balance Projections for FY 2018-19 (in MU)

Sl. No.	Particulars	FY 2018-19
A	Energy Requirement	
1	Energy Sales	1,433.06

Sl. No.	Particulars	FY 2018-19
2	Distribution Loss (%)	10.00%
3	Distribution Loss (MU)	159.27
4	Energy Required at Distribution Periphery	1,592.33
B	Energy Availability	
1	Power Purchase from CGS outside the State	498.23
2	Power Purchase from within the State	1,034.89
3	Renewable Energy Procurement for Non-Solar RPO (including MSW)	9.35
4	Renewable Energy Procurement for Solar RPO	
5	Purchase/ (Sale) from Short Term and Bilateral Sources	76.76
6	Gross Power Purchase Quantum	1,619.22
7	DTL Transmission losses (%)	26.89
8	Energy Available	1,592.33

4.8 Operation and Maintenance Expenses

4.8.1 NDMC has attempted the projection for the O&M expenses as per the methodology specified in the DERC (Terms and Conditions for Determination of Tariff) Regulations 2017. The Regulations specify:

“92. Normative Operation and Maintenance expenses of a Distribution Licensee shall consist of:

- a) Employee Expenses,*
- b) Administrative and General Expenses; and*
- c) Repair and Maintenance Expenses.*

93. Normative Operation and Maintenance expenses of a Distribution Licensee for a Control Period shall be derived on the basis of audited Operation and Maintenance expenses for last five (5) completed Financial Years vis-à-vis normative Operation and Maintenance expenses allowed by the Commission during the corresponding period based on the following parameters:

- a) Load growth,*
- b) Consumer growth,*
- c) Commercial loss,*
- d) Distribution loss,*
- e) Inflation,*
- f) Efficiency,*
- g) Capital base and,*
- h) Any other factor.”*

4.8.2 NDMC submits the employee expenses in 2016-17 have increased on account of

pay revision and therefore it may not be prudent to consider the average of last five years to derive the expenses in the ensuing years. Accordingly, the actual expenses for 2016-17 have been escalated at 5.61% (escalation factor considered by the Hon'ble Commission in the tariff order for 2017-18) to arrive at the employee expenses in 2018-19. NDMC will submit the actual expenses at the time of truing up and also provide justification of deviations, if any at that stage.

- 4.8.3 NDMC further submits that it was not a party to the Transfer scheme notified for unbundling of erstwhile DVB. Accordingly, no liability of the Employee Pension Trust should be borne by the consumers in the NDMC license area. It is therefore requested that the Hon'ble Commission may kindly consider the aforesaid submission while deciding such matters.
- 4.8.4 On similar lines, the actual expenses for A & G and normative expenses for R & M as considered in 2016-17 have been escalated at 5.61% to arrive at the normative expenses for 2018-19. Repairs and Maintenance expenses are critical for ensuing reliable and quality power supply in the NDMC license area and therefore NDMC requests the Hon'ble Commission to consider the submissions and approve the O & M expenses as requested in this petition.

- 4.8.5 The O&M Expenses projected for FY 2018-19 is as follows:

Table 50: O&M Expenses Projected for FY 2018-19 (Rs. Crore)

Sl. No.	Particulars	FY 2018-19
1	Employee Expenses	154.68
2	A & G	11.42
3	R & M	62.27
4	O&M Expenses	228.38

- 4.8.6 NDMC requests the Hon'ble Commission to approve the O&M costs for FY 2018-19 as submitted above and allow the actual costs to be considered during True-up of the respective period.

4.9 Allocation of Administrative Department and Civil Engineering Department Expenses

- 4.9.1 NDMC submits that it has a separate administration department consisting of NDMC Board, Finance Department, General Administration, Law Department, Public Relations, Staff and Labour welfare, Vigilance department, Auto workshop, Information & Technology, Engineer-in-Chief etc. Also, there is a separate Civil Engineering Department and the services of the department are utilized for the civil works undertaken for electricity substation, lines and other electrical works. Thus, the services of the Administration & Civil Engineering Department are common to all the functions carried out by NDMC and the expenditure pertaining to these departments should be allocated to all functions of NDMC.
- 4.9.2 NDMC submits that it is in a process to segregate the Accounts of Electricity Division. This activity of segregation was assigned to SBI Caps, however, the completion of this activity has got delayed. The process of segregation of Accounts of Electricity Division is still under progress and expected to complete shortly. Till such time the Accounts are segregated, NDMC proposes to consider the submissions as made in the current petition and requests the Hon'ble Commission to kindly approve the same.

Table 51: Allocation of Administrative Department and Civil Engineering Department Expenses (Rs. Crore)

Sl. No.	Particulars	FY 2018-19
1	Allocation of Administrative Expenses to Power SBU	35.37
2	Cost of Civil Engineering Department	10.00
3	Total	45.37

4.10 Capital Investment and Capitalisation

- 4.10.1 The DERC (Terms and Conditions for Determination of Tariff) Regulations 2017 specifies:

"5

...

(16) Capital Investment Plan taking into account the sales/demand forecast, power procurement plan, distribution loss trajectory, targets for quality of supply etc.;

(17) *The investment plan shall be scheme-wise and include:*

- a) *Purpose of investment (such as replacement of existing assets, meeting load growth, technical loss reduction, reactive energy requirements, customer service improvement, improvement in quality and reliability of supply, etc),*
 - b) *Capital Structure,*
 - c) *Capitalization Schedule,*
 - d) *Financing Plan,*
 - e) *Cost-benefit analysis,*
 - f) *Performance improvement envisaged in the Control Period,*
 - g) *Any other factors influencing investment,*
- ...”

4.10.2 The following table provides a summary to the envisaged investment to be incurred in FY 2018-19.

Table 52: Capital Investment Planned/Capitalisation for FY 2018-19 (Rs. Crore)

Particulars	FY 2018-19
Renovation and Modernization of 33/11 KV SS	11.75
UG Cable	10.79
Installation of Distribution Transformer	1.46
Capacity enhancement of LT substation	19.19
Capacitor Bank	0.65
Metering	17.39
Others	39.87
Total	101.10

4.11 Financing of New Investment

4.11.1 NDMC submits that being a Municipal Council, it doesn't take any debt and generate funds for capital expenditure from its internal resources only. However, in lines with the regulatory norms, NDMC wish to submit to the Hon'ble Commission to consider the normative Debt - Equity ratio of 70:30 for the purpose of allowing return on capital employed considering a normative debt rate of 8.10% and RoE of 16%.

4.12 Depreciation

4.12.1 NDMC submits to apply an average rate of depreciation for distribution assets @ 3.60 % for computing depreciation for FY 2018-19.

Table 53: Projected Depreciation of Fixed Assets for FY 2018-19 (Rs. Crore)

Sl. No.	Particulars	Projections
1	Average GFA	1,128.22
2	Average Consumer Contribution	16.14
3	Average Assets Net of Consumer Contribution	1,112.08
4	Average Depreciation Rate	3.60%
5	Depreciation	40.04

4.12.2 NDMC submits that the Gross Fixed Assets has been arrived on the basis of the Draft Report submitted by SBI Caps with regards to separation of assets and accounts for Electricity Distribution SBU of NDMC and the actual capital expenditure and capitalization for FY15, FY16, FY 17 and projected capitalisation in FY 18.

4.13 Working Capital

4.13.1 The DERC Tariff Regulation, 2017 specified the following for computation of Working Capital.

“84.

...

(4) *Distribution Licensee as follows:*

(i) *Working capital for wheeling business of electricity shall consist of ARR for two months of Wheeling charges.*

(ii) *Working capital for Retail Supply business of electricity shall consist of*

(d) *ARR for two months for retail supply business of electricity;*

(e) *Less: Net Power Purchase cost for one month;*

(f) *Less: Transmission charges for one month.*

4.13.2 Accordingly, NDMC has computed the Working Capital as follows:

Table 54: Projected Working Capital for FY 2018-19

Sl. No.	Particulars	FY 2018-19
1	ARR for two months for retail supply business of Electricity	214.91
2	Less: Net Power Purchase Cost for one month	76.02
3	Less: Transmission Charges for one month	
4	Working Capital	135.59

4.14 Non-Tariff Income

4.14.1 NDMC has proposed Non-Tariff Income for FY 2018-19 which is as follows:

Table 55: Projected Non-Tariff Income for FY 2018-19

Non-Tariff income	FY 2018-19
Total	2.37

4.15 Return on Capital Employed

4.15.1 For the purpose of this submission, NDMC is submitting the ROCE calculations in line with the Tariff Regulations 2011. For calculating RoCE, NDMC has adopted of normative debt - equity ratio of 70:30, and calculated WACC considering return on equity at the rate of 16% and cost of debt at 8.10%. Detailed calculation of Regulated Rate Base, Change in Working Capital, WACC leading up to estimation of RoCE is shown in table below:

Table 56: RRB for FY 2018-19 (Rs. Crore)

Sl. No.	Particulars	Actual for 2018-19
1	RRB - Base Year	
A	Opening Balance of GFA	1077.67
B	Opening Balance of Working Capital	131.17
C	Opening Balance of Accumulated Depreciation	570.72
D	Opening balance of Accumulated Consumer Contribution (in proportion of OCFA to total OCFA + CWIP + Stores)	16.14
E	(A+B)-(C+D) i.e., RRB opening	621.98
2	RRB - for the year	
F	Investments in capital expenditure during the year	101.10

Sl. No.	Particulars	Actual for 2018-19
G	Depreciation for the year	40.04
H	Consumer Contribution, Grants, etc for the year	-
I	Fixed asset retirement/Decapitalisation applicable	
J	Change in Working Capital	3.76
K	Change in RRB During 2018-19	34.29
	[(F-G-H)/2+J]	
3	RRB Opening Balance	621.98
	RRB for the year	34.29
	RRB Closing (E+F+H-G)	656.27
4	Opening in Regulated Rate Base (RRB) (i)	621.98
	Change in RRB	34.29
	Regulated Rate Base (RRB) (i)	656.27

4.16 Return on Capital Employed

4.16.1 NDMC has adopted rate of return on equity for FY 2018-19 at 16% as per DERC Tariff Regulations, 2017. Interest rate on the Debt has been taken as 8.10% for FY 2018-19 as considered by the Hon'ble Commission for determination of tariff for 2017-18. The said rate may kindly be considered as per prevailing rates in the market at the time of truing up for 2018-19.

Table 57: Return on Capital Employed for FY 2018-19 (Rs. Crore)

Sl. No.	Particulars	FY 2018-19
1	Regulated Rate Base (RRB)	656.27
2	Working Capital Loan	134.93
3	Net RRB	521.34
4	Rate of return on Equity	16%
5	Rate of Return on Debt	8.10%
6	Weighted Average Cost of Capital (WACC)	9.98%
7	Return on Capital Employed (RoCE)	65.51

4.17 Income Tax

NDMC being exempted from Income tax has not proposed any tax liability for 2018-19.

4.18 Aggregate Revenue Requirement

4.18.1 NDMC submits the Aggregate Revenue Requirement for FY 2018-19 as below:

Table 58: Projected ARR for FY 2018-19 (Rs. Crore)

Sl. No.	Particulars	FY 2018-19
1	Cost of power purchase, including T&D Losses	809.20
2	Inter-State Transmission charges	29.94
3	Intra-state Transmission charges including SLDC charges	43.77
	Rebate on Timely Payments	-17.66
4	Net Operation & Maintenance (O&M)	228.38
5	Depreciation	40.04
6	Administrative Dept. & Civil Engg. Dept	45.37
7	RoCE	65.51
8	Income Tax	-
9	Aggregate Revenue Requirement	1244.55
10	Less: Non-Tariff Income	2.37
11	Aggregate Revenue Requirement (9 - 10)	1242.17
12	Revenue at Existing Tariff	1180.99
13	Revenue (Gap)/Surplus for FY 2018-19 (11 - 12)	(61.19)
14	Revenue (Gap)/Surplus for FY 2017-18	(36.51)
15	Revenue (Gap)/Surplus for FY 2016-17	(122.00)
16	Total Revenue Gap to be adjusted in ARR FY 2018-19	(219.70)

4.19 Tariff Design

4.19.1 There is a total Net Gap of Rs. 219.70 Crore, including Gap for FY 2017-18 amounting to Rs. 36.51 Crore, gap for FY 2016-17 amounting to Rs.122 Crore.

4.19.2 The existing Tariff applicable during FY 2017-18 would generate Rs. 1,180.99 Crore. The recovery of total gap of Rs. 219.70 Crore would require an overall tariff hike of 20%. Therefore, NDMC proposes an average tariff hike of 19% across consumer categories to meet the projected revenue gap at the end of the FY 2018-19.

4.20 Tariff Proposal

4.20.1 NDMC submits that an average hike of 19% would be required in the existing tariff in order to recover the ARR for the year FY 2018-19. The detailed category-wise sales, existing tariff and proposed hike in the tariff for each category is provided

in the appropriate formats prescribed by the Hon'ble Commission. The Petitioner requests the Hon'ble Commission to kindly consider the same.

4.20.2 NDMC proposes to keep the remaining terms and conditions of tariff unchanged. NDMC has worked out the Revenue and Average Billing Rate as per Proposed Tariff, which is summarised in the following table.

Table 59: Revenue and ABR for Existing Vs. Proposed Tariff for FY 2018-19

Sl. No.	Category	Energy Sales	Revenue at Existing Tariff	Average Billing Rate at Existing Tariff	Hike Proposed in Existing Tariff	Revised Revenue Proposed	Average Billing Rate as per Proposed Tariff
		MU	Rs. Crore	Rs./kWh	%	Rs. Crore	Rs./kWh
1	Domestic	272.66	185.89	6.82	20.00%	220.49	8.09
2	Non-Domestic LT (up to 140 kW/150 kVA)	279.91	264.56	9.45	20.00%	313.86	11.21
3	Mixed Load*	798.42	663.19	8.31	20.00%	786.85	9.86
4	Small Industrial Power	0.05	0.04	9.41	20.00%	0.05	11.17
5	Public Lighting	7.93	6.19	7.80	20.00%	7.34	9.25
7	DMRC	11.97	0.36	-	20.00%	0.42	-
	Total	62.11	50.23	8.09	20.00%	59.58	9.59

*Mixed Load includes Non-Domestic LT above 140 kW/ 150 kVA and Non-Domestic HT