

A. Introduction

- 1.1 Tata Power Delhi Distribution Limited (TPDDL), the Distribution Licensee, has filed its Petition for Approval of True up for FY 2016-17 and ARR for FY 2018-19.
- 1.2 The Executive Summary contains the summary of the Petition filed by TPDDL for True up for FY 2016-17 (based on audited accounts) and ARR and Tariff of FY 2018-19 (based on projections).
- 1.3 The Commission shall true-up the ARR for FY 2016-17 as per DERC MYT Regulations, 2011, after prudence check.
- 1.4 ARR and Tariff for FY 2018-19 shall be based on the provisions of Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2017, which broadly has the following components:
 - a. Power Purchase Cost including transmission charges
 - b. Operation and Maintenance (O&M) expenses
 - i. Employee Expenses
 - ii. Administrative & General Expenses
 - iii. Repair & Maintenance Expenses
 - c. Return on Capital Employed
 - d. Depreciation
 - e. Income Tax.
 - f. Non-tariff Income, etc.
- 1.5 Depreciation and RoCE shall be Trued up based on the actual capital expenditure and actual capitalization vis-à- vis capital investment plan (capital expenditure and capitalization) approved by the Commission-Controllable parameters.
- 1.6 Variation in revenue / expenditure on account of uncontrollable sales / power purchase respectively – Uncontrollable parameters.
- 1.7 The figures of various components in the Executive Summary have been extracted from the Petitions filed by TPDDL for ease of understanding to various stakeholders. However, the complete Petition is also available on DERC website <http://www.derc.gov.in/>

B. TRUE UP OF FY 2016-17

- 1.8 TPDDL has billed Energy & Revenue (net of E. tax) of Rs. 6,637.89 Cr. (8,260.52 MU) at approved Retail Supply Tariffs for FY 2016-17.

Table 1: Energy Sales & Revenue for FY 2016-17

Category	For FY 16-17				
	Billed (MU)	Billed revenue other than 8% DRS	8% Billed DRS	Total Billed Revenue (Rs Cr)	ABR (Rs/ KWh)
Domestic	3,772.53	2,064.91	165.05	2,229.96	5.91
Non-Domestic	1,464.02	1,499.16	119.47	1,618.63	11.06
Industrial	2,312.81	2,070.58	165.43	2,236.01	9.67
Irrigation & Agriculture	12.64	4.14	0.33	4.47	3.53
Public Lighting	148.00	108.21	8.64	116.85	7.89
Delhi Jal Board	238.74	188.35	15.06	203.42	8.52
Railway Traction	48.06	35.20	2.81	38.01	7.91
DMRC	149.50	94.86	7.59	102.45	6.85
Own consumption	17.95	-	-	-	-
Advertisement & Hoarding	1.18	1.73	0.14	1.87	15.84
Others	95.08	85.18	6.77	91.95	9.67
Open Access charges offered as Non-Tariff Income		(5.75)	0.01	(5.74)	
Total	8,260.52	6,146.57	491.32	6,637.89	8.04
Add- E. Tax				297.75	
Total Revenue Billed	8,260.52			6,935.64	8.40

- 1.9 TPDDL has submitted AT&C loss level of 12.825% for FY 2016-17 (i.e. 0.50% loss reduction over the previous year Target AT&C loss level of 13.325%) as follows:

Table 2: AT&C Loss Target for FY 2016-17

Sr. No.	Particulars	Amount
A	Previous year AT&C Losses target for FY 2015-16	13.325%
B	Target reduction for FY 2016-17	0.50%
C	AT&C Losses target for FY 2016-17	12.825%

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

Sr. No.	Particular	UoM	Amount	Remarks
A	Energy Input at TPDDL Periphery	MU	9,039.68	
B	Units Billed	MU	8,260.52	
C	Amount Billed	(Rs Cr)	6,129.82	

Sr. No.	Particular	UoM	Amount	Remarks
D	Average Billing Rate	Rs/kWh	7.42	((C/B)*10)
E	Distribution Loss	%	8.62%	(1-B/A)
F	Amount Collected	(Rs Cr)	6,118.98	
G	Collection Efficiency	%	99.82%	(F/C)
H	Units Realized	MU	8,245.90	(B*G)
I	AT&C Loss Level	%	8.78%	(1-H/A)

1.10 The Power Purchase Quantum as submitted by TPDDL is tabulated below:

Table 4: Power Purchase Quantum for FY 2016-17 as per Auditor's certificate

Sr. No.	Particulars	Actual Power Purchase (MUs)	Remarks /Ref
A	Power Purchase:		
i	Gross Power Purchase Quantum	11202.12	
ii	Short term sale of Power	(1829.78)	
iii	Net Power Purchase	9372.35	(i+ii)
B	Transmission Loss:		
I	Inter-State Transmission Loss	(300.07)	
li	Intra-State Transmission Loss	(32.60)	
lii	Total Transmission Loss	(332.67)	(i+ii)
C	Net Power Available after Transmission Loss	9039.68	(A-B)

1.11 The following table shows the RPO obligations as submitted by TPDDL for FY 2016-17:

Table 5: Energy Availability to meet RPO obligations for FY 16-17

Sr. No.	Name of Stations	Units Billed (MU)	Fixed Cost (Rs. Cr.)	Variable Cost (Rs. Cr.)	Others Charges (Rs. Cr.)	Total Cost (Rs. Cr.)	Average cost (Rs. Cr.)
I	Solar – Own	2.17	0.00	3.28	-	3.28	15.15
li	Solar Net Metering	0.07	0.00	0.03	-	0.03	5.03
lii	Solar – SECI	43.19	0.00	23.75	0.02	23.78	5.51
Iv	TOWMCL	45.64	0.00	29.37	-	29.37	6.44
V	DMSWSL	3.57	0.00	2.51	-	2.51	7.03
	Total	94.63		58.94	0.02	58.96	

1.12 The following table shows the actual power purchase cost as submitted by TPDDL for FY 2016-17:

Table 6: Power Purchase Cost for FY 2016-17

Particulars	Amount (Rs. Cr.)
Power Purchase - CSGS*	3,322.33
Short Term Power Purchase	557.64

Particulars	Amount (Rs. Cr.)
Power Purchase – Delhi Gencos#	650.85
RPO Obligations	58.96
Cost of REC certificate – towards RPO	25.00
Gross Power Purchase Cost	4614.78
Add: Transmission Charges	
PGCIL charges	474.28
DTL charges	329.14
Other transmission charges (including Pension Trust)	231.06
Less: Surplus Power sold / Banked / UI sales	(487.76)
Power Purchase Cost (Audited)	5161.50
Less- Net Normative Rebate on power purchase	82.72
Less- Rebate on account of Transmission charges	16.94
Add back- Cost towards Rithala plant (to be treated separately)	128.18
Add- Normative additional units of power Banking @ 4/unit	7.05
Net Power Purchase Cost	5197.07
Energy Input (MU)	9039.68
Average Power Purchase Rate – Rs/unit	5.75

*Excludes cost of BTPS, # Includes cost of BTPS

1.13 The O&M Expenses as considered by TPDDL during FY 2016-17 is tabulated below:

Table 7: O&M Expenses for FY 2016-17 (Rs. Cr.)

Sr. No.	Particulars	Amount
A	Employee Cost (net of Capitalization)	421.48
B	A&G Expenses	71.81
C	R&M Expenses	154.43
D	Total O&M expenses	647.72
E	Efficiency factor (%)	1.00%
F	Less: Efficiency Improvement	6.48
G	Add: SVRS Pension	2.95
H	Net O&M Expenses	644.20

1.14 The Non-Tariff Income claimed by TPDDL for Truing Up for FY 2016-17 is Rs. 111.12 Cr. Break-up of the same is tabulated below:

Table 8: Non-Tariff Income for FY 2016-17 (Rs. Cr.)

Sr. No.	Particular	(Rs Cr)	Remarks
A	Other Operating Income	107.90	
B	Other Income	57.06	
C	Open Access Charges	5.74	
D	Interest on Consumer Security Deposit	27.54	
E	Income from other business	(45.56)	

Sr. No.	Particular	(Rs Cr)	Remarks
F	Service Line Charges	4.04	
G	Total Income	156.70	(A+B+C+D+E+F)
Less: Income included in above, not passed as Non-Tariff Income			
H	Transfer from capital grants	0.50	
I	Transfer from cons. Cont. Capital work	28.58	
J	Interest/Short term capital gain	3.11	
K	Financing Cost of LPSC	11.81	
L	Incentive towards Street Light	1.60	
M	Total	45.59	(H+I+J+K+L)
N	Sub- Total	111.12	(G)-(M)

1.15 The Gross Fixed Assets for FY 2016-17 is tabulated as below:

Table 9: Gross Fixed Assets for FY 2016-17 (Rs. Cr.)

Sr. No.	Particulars	Amount	Remark
A	Opening Balance	5,380.91	
B	Total Capitalization during the year	455.11	
C	De-Capitalization*		
D	Closing Balance	5,836.01	(A+B-C)
E	Average Fixed Assets	5,608.46	(A+D)/2

* as the matter is sub-judice no retirement has been considered

1.16 The Depreciation on Average Assets (Net of consumer contribution/grants) for FY 2016-17 is tabulated as below:

Table 10: Depreciation on Net Fixed Assets for FY 2016-17 (Rs. Cr.)

Sr. No.	Particulars	Amount	Remark
A	Average Assets	4,813.25	
B	Average Depreciation Rate	3.91%	
C	Depreciation (Net of Consumer Contribution)	188.20	(C*D)

1.17 The Computation of Regulated Rate Base submitted by TPDDL for the period FY 16-17 tabulated as below:

Table 11: Computation of Regulated Rate Base for the period FY 16-17 (Rs. Cr.)

Sr. No.	Particulars	Amount
A	Opening Balance of OCFA	5,380.91
B	Opening Balance of Working Capital	632.68
C	Opening Balance of Accumulated Depreciation	1,848.17
D	Opening balance of Accumulated Consumer Contribution	739.98

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Sr. No.	Particulars	Amount
E	RRB opening	3,425.44
	RRB - for the year	
F	Investments in capital expenditure during the year	455.11
G	Depreciation for the year	188.20
H	Consumer Contribution, Grants, etc. for the year	110.47
I	Change in Working Capital	40.55
J	RRB – Closing	3,622.43
K	ΔAB (Change in Regulated Base)	118.76
L	RRB(i)	3,544.21

1.18 The Computation of Working Capital for FY 2016-17 submitted by TPDDL is tabulated as below:

Table 12: Computation of working capital for FY 2016-17

Sr. No.	Particulars	Amount (Rs Cr)	Remark
A	Receivables for Billed Revenue excluding E.TAX	6,637.89	
B	Receivables equivalent to 2 months average billing	1,106.31	(A/12*2)
C	Power Purchase expenses	5,197.07	
D	Less: 1/12th of power purchase expenses	433.09	(C/12*1)
E	Total working capital for the year	673.23	(B-D)

1.19 The Aggregate Revenue Requirement for FY 2016-17 as submitted by TPDDL is as below:

Table 13: Aggregate Revenue Requirement for FY 2016-17 (Rs. Cr.)

Sr. No.	Particulars	Amount
A	Power Purchase cost (incl. Transmission charges)	5,197.07
B	O&M Expenses	644.20
C	Other expenses/Statutory levies	34.35
D	Depreciation	188.20
E	Return on Capital Employed (RoCE)	581.81
F	Income Tax	116.65
G	Less: Non-tariff income	111.12
H	Aggregate Revenue Requirement	6,651.16

1.20 The Revenue Surplus/(Gap) for FY 2016-17 is tabulated below:

Table 14: Computation of Revenue surplus/ (Gap) for FY 2016-17 (Rs. Cr.)

Sr. No.	Particular	Actual as per Petitioner	Remarks
A	Revenue Available	6,118.98	
B	Aggregate Revenue Requirement	6,651.16	
C	Revenue Surplus/(Gap)	(532.19)	(A-B)

C. ARR for FY 2018-19

1.21 TPDDL has submitted its Estimated Billed Revenue for FY 2018-19 as shown below:

Table 15: Estimated Billed Revenue for FY 18-19 (Rs. Cr.)

Categories	FY 2018-19			
	Billed Units(MU)	Fixed Charges	Energy Charges	Total Revenue
Domestic	4,275.17	121.76	2,235.32	2,357.07
Non Domestic	1,577.07	219.49	1,411.14	1,630.63
Industrial	2,379.59	249.08	1,945.03	2,194.11
Irrigation & Agriculture	13.34	0.72	3.68	4.40
Street Lighting	84.72	-	62.03	62.03
Delhi Jal Board	248.65	11.75	186.09	197.84
DMRC	150.05	5.96	93.64	99.60
Own Consumption	22.08			0.00
Others	103.35	8.34	76.45	84.80
Total	8,854.02	617.11	6,013.38	6,630.49
8% Deficit Revenue Surcharge				527.74

1.22 TPDDL has submitted its Estimated Energy Requirements for FY 2018-19 as shown below:

Table 16: Estimated Energy Requirements for FY 18-19

Sr. No.	Particulars	UoM	Amount	Remark
A	Expected Sales	MU	8,854.02	
B	Distribution Loss	%	8.19%	
C	Energy Input (at TPDDL periphery)	MU	9,643.85	$((A/(1-B))*100)$
D	Distribution Loss	MU	789.83	

1.23 TPDDL has submitted its Estimated Balance Summary and Power Purchase Cost for FY 2018-19 as shown below:

Table 17: Energy Balance Summary and Power Purchase Cost for FY 18-19

Sr. No.	Particulars	FY 2018-19		
		Quantity (MU)	Amount (Rs. Cr.)	Average Cost (Rs./kWh)
1	Power Purchase from CSGS	10086.42	4037.98	4.00
	Short Term Power Purchase	520.00	206.00	
2	PGCIL Losses & Charges	356.67	384.00	
3	Power Purchase from SGS	579.91	602.19	10.38
4	Renewable Energy Plants and small Hydro	295.03	158.90	5.39
5	Cost towards Renewable Energy Certificates		179.03	
6	Power Available at Delhi Periphery (cost excluding RECs)	11,124.69	5568.10	5.01
7	DTL Loss & Transmission Charges	95.45	446.76	

Sr. No.	Particulars	FY 2018-19		
		Quantity (MU)	Amount (Rs. Cr.)	Average Cost (Rs./kWh)
8	Power Purchase Rebate @ 2%		91.98	
9	Rebate on Transmission Charges @ 2%		14.89	
10	Power Available to DISCOM	11,029.25	5907.99	5.36
11	Sales	8854.02		
12	Distribution Loss	789.83		
13	Net Power Purchase cost including Transmission charges and REC	9,643.85	5,492.38	5.70
14	Net Surplus Power	1,385.40	415.62	3.00

1.24 TPDDL has submitted its approved Capitalization in DERC Business Plan Regulations, 2017(excluding Deposit Work) for FY 2018-19 as shown below:

Table 18: Approved Capitalization for FY 2018-19

Particulars	Rs. Crore
Capitalization	414
Smart Meter	66
Total Capitalization without deposit work	430
Add: Deposit Work	50
Total	480

1.25 TPDDL has submitted its Computation of Change in Working Capital for FY 2018-19 as shown below:

Table 19: Computation of Change in Working Capital (Rs. Cr.)

Sr. No.	Particulars	Amount		Remark
		FY 18-19		
A	Annual revenues requirement	7,487.86		
B	Receivables equivalent to 2 months ARR		1,247.98	A/12*2
C	Power Purchase expenses	5,492.38		
D	Add: 1/12th of power purchase expenses		457.70	C/12
E	Total working capital		790.28	B-E
F	Opening working capital		778.95	
G	Change in working capital		11.33	(E-F)

1.26 TPDDL has submitted its Computation of Return on Capital Employment for FY 2018-19 as shown below:

Table 20: Computation of Return on Capital Employed (Rs. Cr.)

Sr. No.	Particulars	Amount	Reference
A	RRB (i)	3,980.45	
B	WACC	15.79%	
C	Return on Capital Employed	628.62	(A*B)

1.27 The Non-Tariff Income estimated by TPDDL for FY 2018-19 is tabulated below:

Table 21: Non-Tariff Income for FY 2018-19

Sr. No.	Particulars	FY 18-19
A	Non-Tariff Income/Interest on Security Deposit	111.12
B	Additional Open Access charges	12.00
C	Total	123.12

1.28 The summary of ARR requirement for FY 2018-19 submitted by TPDDL is tabulated below:

Table 22: Summary of Aggregate Revenue Requirement for FY 2018-19 (Rs. Cr.)

Sr. No.	Particular	FY 18-19 Amount
A	Cost of Power Purchase	5,492.38
B	O&M Expenses	801.86
C	Depreciation	285.24
D	Return on Capital Employed	628.62
E	Carrying Cost	402.88
F	Less: Non-Tariff Income/ Interest on consumer security deposit	123.12
H	Annual Revenue Requirement	7,487.86

1.29 The Computation of Revenue (Gap) for FY 2018-19 without carrying cost is tabulated below:

Table 23: Computations of Revenue (Gap) for FY 2018-19 without carrying Cost (Rs. Cr.)

Sr. No.	Particular	FY 2018-19 Estimated	Remarks
A	Aggregate Revenue Requirement for the year without carrying cost	7,084.99	
B	Revenue available for the year without DRS	6,597.34	
C	Revenue (Gap)/surplus for the year	(487.65)	(B-A)

1.30 The Computation of Closing Revenue Gap for FY 2018-19 as submitted by TPPDL is tabulated below:

Table 24: Computations of Closing Revenue Gap (Rs. Cr.)

Sr. No.	Particular	FY 2018-19 Estimated	Remarks
A	Opening Revenue Gap	(3,426.68)	
B	Revenue (Gap)/Surplus for the year	(487.65)	
C	Closing Revenue (Gap)	(3,914.33)	(A+B)
D	Carrying Cost Rate	10.98%	
E	Carrying Cost	(402.88)	(A+B/2)*D
F	Recovery of carrying cost from 8% Deficit Revenue Recovery Surcharge	525.10	
G	Closing Revenue Gap (including carrying cost)	(3,792.10)	(A+B+E+F)