

**ARR for FY 2021-22**

As per Regulation 3 of *Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2017*, the Commission has notified Business Plan Regulations, 2019, which contains the following parameter applicable for a Control Period (FY 2020-21 to FY 2022-23):

- (1) Rate of Return on Equity
- (2) Margin for rate of interest on Loan
- (3) Operation and Maintenance Expenses
- (4) Capital Investment Plan
- (5) Mechanism for sharing of incentive-disincentive mechanism
- (6) Allocation of overhead expenses incurred on account of Administrative Expenditure out of Operation and Maintenance Expenses for creation of Capital Asset

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(9) Distribution Norms:

- (a) Distribution Loss Target
- (b) Collection Efficiency Target
- (c) Targets for Solar and Non Solar RPO
- (d) Contingency limit for Sale through Deviation Settlement Mechanism (Unscheduled Interchange) transactions
- (e) The ratio of various ARR components for segregation of ARR into Retail Supply and Wheeling Business.

Based on the above norms, the Petitioner submits its Aggregate Revenue Requirement for FY 2021-22.

with you



**Projected Energy Sales & Billed Revenue for FY 2021-22**

To estimate the energy sales for next year, the Petitioner usually considers previous year's available growth trends and further assumes the underlying factors which drives the demand for electricity that are expected to follow the same growth trend in future year also.

But FY 20-21 is a different year and is under global crisis where the entire world including India is under the grip of the deadly disease COVID- 19. The Central & State Government in order to contain the spread of novel corona virus had issued several precautionary measures and advisories most important being social distancing and lockdown in phase manner.

To contain and arrest the spread, transmission of the disease various Notifications, Guidelines, orders, directions were issued by the Ministry of Home Affairs (Government of India), GNCTD, SEBI, Ministry of Finance (Government of India), Ministry of Civil Aviation, Ministry of Power and various Authorities.

COVID-19 has not only affected normal human life but also caused slowdown in various sectors of the economy. This year has to be treated as an extraordinary year due to variation in demand and supply of electricity. The lockdown due to COVID-19 has severely affected the demand of power in FY 20-21, thus it would not be appropriate to consider energy sales of FY 20-21 to aptly projection sales for next year.

Therefore to estimate the energy sales for next year i.e. FY 21-22 the Petitioner has considered FY 19-20 as base year for projections instead of FY 20-21 and applied growth factor on FY 19-20. Therefore, demand forecast is based on the assumption that the past consumption growth trend will continue in the future also excluding FY 20-21.

The assumptions considered for forecasting category wise sales are discussed below:

1. The category wise and year wise Compounded Annual Growth Rate (CAGR) has been calculated for the past sales pattern.
2. For those categories where CAGR/ past growth trends are not showing any particular type of movement then the demand has been forecasted based on consumption pattern of FY 19-20.



3. Impact of Demand Side Management due to replacement of existing electrical equipment's with the star rated equipment's have been considered while forecasting the sales.
4. Impact of Net Metering due to Solar Energy generated by the different categories of consumers has also been factored while forecasting the energy sales. Prospective plans of generation under Net metering is given below:

Category	FY 21-22 (in MUs)
Domestic	10
Non Domestic	22
Industrial	1.4
<b>Total</b>	<b>33.4</b>

5. Impact of movement of consumers under Open Access has also been factored for future years. In FY 21-22, projection of reduction in consumption (in MU) and Load (in MW) due to open Access is given below:

Category	FY 21-22 (in MUs)
DMRC	68
Industrial	24
Non Domestic	2
<b>Total</b>	<b>94</b>

6. Impact of COVID-19 pandemic on energy sales of Non Domestic Consumers & Industrial Consumers also considered.

Previous year trends are given below:

**Year on Year Category wise billed Sale from FY 2014-15 onwards is given below**

In the last 5 years, there has been an annual growth of 3.59% in billed units (i.e. from the level of 7,616 MUs to 9,086 Mus.)

Table 5.1: Category wise summary of units sold from FY 15 to FY 20

Sl. No.	Category	FY15 Sales (MU)	FY16 Sales (MU)	FY17 Sales (MU)	FY18 Sales (MU)	FY19 Sales (MU)	FY20 Sales (MU)	FY21 Sales (MU) Estimated
1	Domestic	3,313	3,404	3,770	3,947	4,068	4,321	4,419
2	Non Domestic	1,343	1,404	1,463	1,528	1,541	1,552	1,078
3	Industrial	2,279	2,349	2,313	2,432	2,539	2,497	1,893
4	Agriculture & Mushroom Cultivation	13	13	13	13	14	15	16
5	Street Lighting	144	148	148	154	116	580	428
6	Delhi Jal Board	219	229	239	243	238		
7	Railway	46	46	48	51	4		
8	DMRC	140	149	149	155	257		
9	Own Consumption	17	18	18	19	12	13	10
10	Advertisement & Hoarding	2	1	1	1	0	0	1
11	Others**	100	92	98	94	79	108	91
	<b>Total</b>	<b>7,616</b>	<b>7,854</b>	<b>8,261</b>	<b>8,638</b>	<b>8867</b>	<b>9,086</b>	<b>7,934</b>

\* As per Form 2.1a for respective years, all subcategory are merged into one main category, hence figures at some places are not matched with information provided in table B1.2 (iii).

\*\* Others includes Staff, Temporary, Theft & Misuse and Own consumptions

Table 5.2: CAGR of Units Billed based on Main Category wise consumption

Sl. No.	Category	CAGR for 5 years	CAGR for 4 years	CAGR for 3 years	CAGR for 2 years	CAGR for 1 years
1	Domestic	5.46%	6.14%	4.65%	4.64%	6.22%
2	Non Domestic	2.94%	2.55%	1.99%	0.79%	0.74%
3	Industrial	1.84%	1.53%	2.58%	1.31%	-1.65%
4	Agriculture & Mushroom Cultivation	3.07%	2.86%	5.73%	7.11%	8.44%
5	Public Utilities	1.11%	0.31%	-0.25%	-1.97%	-5.67%
	<b>Total</b>	<b>3.59%</b>	<b>3.71%</b>	<b>3.22%</b>	<b>2.56%</b>	<b>2.46%</b>



### Domestic

The consumption of energy by domestic consumers constitutes substantial part of total sales of the Petitioner.

Based on the actual sales of 4321 MU for FY 2019-20, the Petitioner has computed the given below CAGR over a period of one year to five years.

CAGR for 5 years	CAGR for 4 years	CAGR for 3 years	CAGR for 2 years	CAGR for 1 year
5.46%	6.14%	4.65%	4.64%	6.22%

Considering the available trends of CAGR, the Petitioner has considered a growth rate of 5.46%, (i.e. 5 year CAGR) to estimate the energy sales for domestic consumers.

Further impact due to energy generated under roof top solar has been adjusted in the domestic consumption as per above assumptions.

Based on above the projected consumption for domestic consumers is computed as below:

**Table 5.3: Projected billed energy for FY 2021-22**

Sl. No.	Category	FY 20 Sales (MU)	Growth (%)	FY 21 Sales (MU)
A	Domestic			
I	Domestic - Others than CGHS	4297.91	5.46%	4,528.37
	<b>Adjusted due to</b>			
	Metering of Roof top solar			10
	Open Access			-
	<b>Net Consumption – Domestic</b>			<b>4,518</b>
II	Single delivery point for CGHS/Hospital	23.18		24.45
	<b>Total Domestic</b>	<b>4321</b>		<b>4,543</b>

### Non-Domestic

The consumption of energy by non-domestic consumers constitutes reasonable share of total sales of the Petitioner. Based on the actual sales of 1552 MU for FY 2019-20, the Petitioner has computed the given below CAGR over a period of one year to five years.

CAGR for 5 years	CAGR for 4 years	CAGR for 3 years	CAGR for 2 years	CAGR for 1 years
2.94%	2.55%	1.99%	0.79%	0.74%

Due to COVID-19 pandemic, in Commercial Consumer category, there is a large impact on sales of Hotels, Shopping Malls, Multiplexes, Educational Institute, Restaurants, Pubs, Banquet Halls, etc. as they are not running at their full capacity and some are even closed. These Commercial consumers will be effected until vaccination for COVID-19 pandemic is available and will take time to resume at their 100% normal capacity.

Considering the same, the projections for next year is envisaged considering a negative growth rate of 10% to estimate the energy sales for Non-domestic consumers.

The Petitioner has though considered the impact of Net Metering arrangement and Open Access for its consumption for Non- Domestic Consumers as per above assumptions.

Based on above projected consumption for non-domestic consumers is computed as below:

**Table 5.4: Projected billed energy for FY 2020-21**

Sl. No.	Category	FY 20 Sales (MU)	Growth (%)	FY 22 Sales (MU)
A	Non-Domestic			
I	Non -Domestic below 3 kVA	1,552	-10%	1397
II	Non -Domestic above 3 kVA			-
	Less: Open Access			2
	Less- Adjustment for Net Metering			22
	<b>Net Consumption</b>			<b>1,373</b>

### **Industrial**

The consumption of energy by Industrial consumers constitutes approx. 1/3<sup>rd</sup> part of total sales of the Petitioner. Based on the actual sales of 2497 MU for FY 2019-20, the Petitioner has computed the given below CAGR over a period of one year to five years.

CAGR for 5 years	CAGR for 4 years	CAGR for 3 years	CAGR for 2 years	CAGR for 1 years
1.84%	1.53%	2.58%	1.31%	-1.65%

Considering the COVID-19 pandemic and available trends of CAGR, in units, consumer and load growth the Petitioner has not considered any growth to estimate the energy sales for Industrial consumers.

The Petitioner has though considered the impact of Net Metering arrangement and Open Access for its consumption for Industrial Consumers as per above assumptions.

Based on above, projected consumption for Industrial consumers is computed as below:

**Table 5.5: Projected billed energy for FY 21-22**

Sl. No.	Category	FY 20 Sales (MU)	Growth (%)	FY 22 Sales (MU)
A	Industrial			
I	Industrial	2,496.57	0%	2492.57
	Less: Open Access			24
	Less- Adjustment for Net Metering			1.4
	<b>Net Consumption</b>			<b>2467.17</b>

### **Agriculture and Mushroom Cultivation**

The consumption of energy by Agriculture & Mushroom cultivation consumers constitutes a very small portion of total sales of the Petitioner.

The Petitioner based on the actual sales has computed the given below CAGR over a period of one year to five years.

CAGR for 5 years	CAGR for 4 years	CAGR for 3 years	CAGR for 2 years	CAGR for 1 years
3.07%	2.86%	5.73%	7.11%	8.44%

The Petitioner has considered the CAGR of 4 Year i.e. 2.86% growth for projecting the agriculture & mushroom cultivation consumption.

**Table 5.6: Projected billed energy for FY 21-22**

Table 5.10: Projected billed energy for FY 21-22				
Sl. No.	Category	FY 20	Growth (%)	FY 22
		Sales (MU)		Sales (MU)
Agriculture & Mushroom				
I	Agriculture & Mushroom	15.03	2.86%	15.46

### **Public Utilities**

The consumption of energy towards public utilities constitutes approx. 7% of total sales of the Petitioner.

Based on the actual sales of 580 MU for FY 2019-20 the Petitioner has computed the given below CAGR over a period of one year to five years.

CAGR for 5 years	CAGR for 4 years	CAGR for 3 years	CAGR for 2 years	CAGR for 1 years
1.11%	0.31%	-0.25%	-1.97%	-5.67%

Based on 4 year CAGR of 0.31%, below projected energy is considered for sale:

**Table 5.7: Projected billed energy for FY 2021-22**

Table 517: Projected billed energy for FY 2021-22				
Sl. No.	Category	FY 20	Growth (%)	FY 22
		Sales (MU)		Sales (MU)
Public Utilities				
I	Public utilities	579.90	0.31%	580.46
	Less- Open Access			68
	Net Consumption			512.46

### Own Consumption

The Hon'ble Commission in its Business Plan Regulations, 2019 has stated that normative Own consumption of DISCOM's shall be considered @ 0.25% of billed sales of the respective year. Based on the same the Petitioner is seeking Own consumption as computed below:

**Table 5.8: Projected energy from FY 2021-22**

Sl. No.	Category	FY 22 Sales (MU)
I	Billed Sale	9029.45
II	Own consumption @ 0.25%	0.25%
III	Own consumption MU	22.57

### Adv. & Hoardings

The consumption of energy by Adv. & Hoardings consumers constitutes a very little portion of total sales of the Petitioner. The Petitioner has considered a negative growth of 10% to project the energy sales for Adv. & Hoardings.

**Table 5.9: Projected energy for FY 2021-22**

Sl. No.	Category	FY 20	Growth	FY 22
		Sales	Rate	Sales (MU)
		(MU)		
I	Adv. & Hoardings	0.38	-10%	0.34

### E – Vehicle

Based on the initiatives taken by Government on E-vehicle and E-bus station expected to commission by November' 2021, consumption of energy sales in this category is projected as below:

**Table 5.10: Projected energy for FY 2021-22**

Sl. No.	Category	FY 20	FY 22
		Sales (MU)	Sales (MU)
I	E vehicle	18.25	18.25
II	Additional requirement due to E- Buses/E- Car		11.23
III	<b>Total</b>		<b>29.48</b>

**Others (including Temporary Supply, Misuse and Theft)**

The Petitioner has projected following sale for temporary, misuse, Theft and Staff category consumers.

**Table 5.11: Projected energy for FY 2021-22**

Sl. No.	Category	FY22 Sales (MU)
I	Others	89.39

Based on the above assumptions and explanations, the category wise estimated summary of billed sale (MU) for FY 21-22 is given below:

**Table 5.12: Projected Sales (MU) for FY 2021-22**

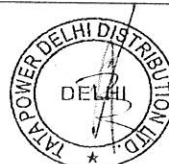
Sl. No	Category	FY 2021-22 Projections
A	Domestic	4542.82
	Domestic - Others than CGHS	4518.37
	Single delivery point for CGHS/Hospital	24.45
B	Non -Domestic	1373.07
C	Industrial	2467.17
D	Agriculture	15.34
E	Mushroom Cultivation	0.12
F	Public Utilities	512.46
G	Adv. & Hoardings	0.34
H	E-Vehicle	29.48
I	Others* including Temporary Supply	89.39
J	Own consumption	22.57
	<b>Total</b>	<b>9052.78</b>

\*Others includes Staff, Own Consumption, Theft & Misuse

**Estimated Consumers for next year**

The Petitioner has projected approx. 18.54 lacs consumers for FY 2021-22. Category wise breakup of Consumers is given below:

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**Table 5.13: Given below is the projected number of consumers for Next year**

Sl. No.	Category	FY 2021-22
A	Domestic	1560428
B	Non –Domestic	231808
C	Industrial	30347
D	Agriculture	4350
E	Mushroom Cultivation	13
F	Public Utilities	6258
G	Adv. & Hoardings	243
H	Others- including E vehicle	20889
	<b>Total</b>	<b>1854336</b>

**Estimated Consumer Load for next year**

For the purpose of computing fixed charges, the Petitioner has projected load of 6048 MW for FY 2021-22. Category wise break up of consumers load is given below:

**Table 5.14: Given below is the projected number of consumer's load for Next year**

Sl. No.	Category	FY 2021-22
A	Domestic	3183
B	Non –Domestic	1247
C	Industrial	1323
D	Agriculture	31
E	Mushroom Cultivation	0
F	Public Utilities	192
G	Adv. & Hoardings	1
H	Others- including E vehicle	72
	<b>Total</b>	<b>6049</b>

**Estimated Revenue at existing Tariff for next year**

The Hon'ble Commission has followed two-part tariff principle for each consumer category (except CGHS colonies) consisting of fixed/ demand charges as well as energy charges.

1. The fixed/ demand charges are specified for different categories as a fixed amount per month or as a fixed amount per kW of sanctioned load per month.
2. The energy charges, on the other hand, are always usage-based and are specified per unit of electricity consumed.

In order to reduce the cost of power purchase during peak hours the Hon'ble Commission has implemented TOD (Time of Day Tariff) wherein peak hour consumption is charged at higher rates which reflects the higher cost of power purchase during peak hours. At the same time, a rebate is being offered on consumption during off peak hours. This is also meant to incentivize consumers to shift a portion of their loads from peak time to off peak time. The Hon'ble Commission in its Tariff Order September, 2015 has reviewed the TOD time slots and restrict the applicability of TOD for the period May- September instead of whole year.

It is further clarified that the Hon'ble Commission vide its Tariff Order dated July, 2012 has introduced 8% Deficit recovery surcharge which is directly linked with the aforesaid two part tariff. The aforesaid surcharge has been imposed for recovery of previous years accumulated Revenue Gap and carrying cost which otherwise has to be met through increase in two- part tariff. The Hon'ble Commission has instead of increase in basic two part tariff introduced additional surcharge directly linked to the fixed charges/ demand charges and energy charges.

#### **Methodology for Computation of Fixed Charges for Domestic Consumers**

- a) For Domestic consumers with sanctioned load less than 5 kW, the revenue from fixed charges is calculated by multiplying the corresponding fixed charge with the number of month for respective consumers in that particular tariff slab.
- b) For Domestic consumers with sanctioned load exceeding 5 kW, the revenue from fixed charges is calculated by multiplying the specified fixed charge with the connected load (in kW) of the category.

**Methodology for Computation of Energy Charges for Domestic Consumers**

For calculation of revenue from energy charges, the actual usage is multiplied by the applicable tariff category slab.

**Methodology for Computation of Fixed Charges & Energy Charges for other than Domestic Consumers and Advertisement & Hording Consumers**

For Non-Domestic, Industrial, Public Utilities billing is done either on kW or kVA basis, as specified in the last approved tariff schedule. Since projections for next 5 years are done only on kW basis for sanctioned load and on kWh basis for energy sales, wherever the tariff is specified in kVA/kVAh terms, the relevant kW/kWh projection is divided by the Power Factor in order to obtain the corresponding kVA/kVAh projection. Thereafter, revenue from demand charges is calculated by multiplying the demand charge of each tariff slab with the sanctioned load of that slab, while revenue from energy charges is calculated by multiplying the energy charges specified for each tariff slab with the energy consumption projected for that slab.

Based on the above factors i.e. energy billed, no. of consumers, consumer load, the Petitioner has estimated revenue at existing retail supply Tariff for next year.

Category wise estimated Revenue Billed for respective year of control period is given below:

Table 5.15: Estimated Billed Revenue for FY 21-22

(Rs Cr)

Category	Fixed Charges	Energy Charges	TOD Tariff	Total Revenue	ABR Rs kWh	5% PT
Domestic	201.97	1781.79	0.00	1983.76	4.37	99.19
Non -Domestic	373.99	1174.12	6.35	1554.46	11.32	77.72
Industrial	396.78	1966.52	13.11	2376.41	9.63	118.82
Agriculture	4.63	2.30	0.00	6.93	4.51	0.35
Mushroom Cultivation	0.04	0.04	0.00	0.08	6.69	0.00
Public Utilities	57.67	347.38	0.29	405.34	7.91	20.27
Adv. & Hoardings	0.16	0.30	0.00	0.45	13.18	0.02
E Vehicle	0.00	13.27	0.03	13.30	4.51	0.67
Others	7.59	60.38	0.04	68.02	6.07	3.40
<b>Total</b>	<b>1042.84</b>	<b>5346.10</b>	<b>19.81</b>	<b>6408.75</b>	<b>7.08</b>	<b>320.44</b>
8.50% PPAC allowed by DERC in order dt. 13.11.20				<b>278.33</b>		
8% Deficit Revenue Surcharge				<b>512.7</b>		

### Collection efficiency

The Hon'ble Commission has approved collection target of 99.50% for 4<sup>th</sup> MYT Control period vide Regulations 26(1) of Delhi Electricity Regulatory Commission Business Plan Regulation, 2019.

Relevant extract of the same is given below:

### **26. TARGET FOR COLLECTION EFFICIENCY**

(1) The targets for Collection Efficiency for FY 2020-21 to FY 2022-23 of the Distribution Licensees shall be 99.50%.

Based on above, collection efficiency at 99.50% level is considered for FY 2020-21.

**Table 5.16: Estimated Energy Collection**

Sl. No.	Particulars	(Rs. Cr)	
		Amount	Remark
A	Estimated Billing at Current Tariffs –without DRS, E tax & Pension Trust	6687.08	Table 5.15
B	Collection Efficiency	99.50%	
C	Estimated Collection	6,653.64	(A*B)

### **Target for Distribution Loss Level**

The Hon'ble Commission in its Business Plan Regulations, 2019 has approved distribution loss reduction targets as mentioned in table below in terms of Regulation 4(9)(a) of the DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017:

**Table 5.17: Distribution loss level for 4<sup>th</sup> MYT Control Period**

Category	FY 2020-21	FY 2021-22	FY 2022-23
Approved Distribution Target Loss level	7.90%	7.80%	7.70%
Year on Year reduction in distribution loss level		0.10%	0.10%

Based on above table, distribution loss level of 7.80% for FY 2021-22 has been considered and corresponding energy requirement at TPDDL periphery comes to 9,818.63 MU for FY 2021-22.

**Table 5.18: Estimated Energy Requirements for FY 21-22**

Sl. No.	Particulars	UoM	Amount	Remark
A	Expected Sales	MU	9,052.78	Table 2.12
B	Distribution Loss	%	7.80%	Table 2.17
C	Energy Input (at TPDDL periphery)	MU	<b>9,818.63</b>	$((A/(1-B))*100)$
D	Distribution Loss	MU	765.85	(C-A)

### Power Purchase Projections for FY 2021-22

Power purchase cost is the single largest component of ARR for a distribution company and hence the same is being submitted as part of MYT Regulations considering power from both existing as well as future renewable power stations.

#### Allocation of Power from Central and State Generating Stations

- Delhi has a firm allocated share in Central Sector Generating Stations (CSGS), State Generating Stations (SGS) and other stations. For the purpose of projecting the units, the latest allocation order has been considered.
- Further, allocation from various stations has been considered as per the Hon'ble Commission Tariff Order for FY 2020-21.
- It is further clarified that no power from unallocated quota has been considered for projection purposes.
- Banking/ Bilateral transactions are not considered, all the short term purchase and sale transactions are considered at exchange only.

#### Energy Availability from the Central Sector, State Sector and Other Generating Stations and cost assumptions:

The Energy available in MU's for the purpose of projections has been computed as below:

- (i) No energy is considered to be scheduled from Rithala in view of DERC directive.
- (ii) The generation expected from Own TPDDL- Solar installed capacity and roof top solar has been considered at 15% CuF.
- (iii) To estimate the energy (MU) which would be scheduled from the long term sources; stations like Hydro, Nuclear, Renewable & Delhi Genco stations have been considered as must run stations. All other plants have been considered to be running at minimum technical limit (MTL) and further, it has been assumed that the plants having ECR less than the estimated sale rate at exchange shall be scheduled to the maximum allocation for maximizing the sale rate of surplus power.
- (iv) Interstate STOA Charges have been considered as 5 Paise for the short term purchase.

- (v) The ECR's have been escalated by 3.9% based on the 5 year CAGR of the actual weighted average ECR from all the plants. ECR of Renewable plants have not been escalated.
- (vi) PGCIL Transmission charges have been extrapolated as per the MW allocation during the year and charges have been escalated by 10% based on the CAGR of past 5 years.
- (vii) New Plant additions considered in FY 2021-22 are:
- Cosmos Hydro - 19.8 MW at Rs. 4.44/- at 45% Cuf from October'21
  - SDMC 8 MW added from 19 Aug-2021 at 75% Cuf @ Rs. 5.5/-
  - SECI Solar 200 MW added from 05-June 21 at 24% Cuf @ Rs. 2.68/-
- (viii) Plants discontinued in FY 2021-22 is:
- IPGCL GTPS is not considered as the PPA is expiring on 31<sup>st</sup> March 2021.

Based on above assumption, power purchase & its cost from various state generating stations for next year is given below:

Power Procurement cost of the above State Generating Plant (Rs Cr.)

To compute the power procurement cost for next year, the following assumptions are considered:

- Increase in Actual Fixed Cost or Fixed Cost is considered based on currently available information/tariff orders.
- Based on the actual variable cost for FY 19-20 for each generating station, the variable rate is escalated @ of 3.90% and considered for the purpose of projections.

**Table 5.19: Projected Power Purchase From State Generating Stations for FY 2021-22**

Sl. No.	Stations	Petitioner Share	Fixed Charge	Variable Charge	Total Charge
		(MU)	(Rs Cr)	(Rs Cr)	(Rs Cr)
<b>A</b>	<b>State Generating Stations</b>				
I	Pragati	296	25	170	195
II	Pragati III	797	285	295	580
	<b>Total SGS</b>	<b>1093</b>	<b>310</b>	<b>466</b>	<b>776</b>

**Central Sector Generating Stations**

- (i) Thermal Plants: The estimates for energy availability from coal based plants are based on the normative month wise availability (PAFM) of the stations.
- (ii) Energy from Nuclear Stations: Energy from nuclear stations (NAPS and RAPS) is taken as per actual energy scheduled during previous years.
- (iii) Hydro Plant: The energy estimation is based on the actual energy received from these plants in previous years.
- (iv) To estimate the energy (MU) which would be scheduled from the CSGS, it has been assumed that the plants having ECR less than the estimated sale rate at exchange shall be scheduled to 85% of allocation.
- (v) Scheduling from these Central Generating Stations Plants have been factored @ 85%, but if variable rates of any station found higher than the sale rate at exchange for that particular month scheduling is restricted to 55%. (Minimum Technical Limit)
- (vi) No New Thermal capacity addition has been considered.

Based on above assumption, power purchase MU & its cost from Central State Generating stations for next year is projected as below:

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**Table 5.20: Projected Power Purchase from Central Generating Stations**

Sl. No.	Source	Petitioner Share	Fixed Charge	Variable Charge	Total Charge
		(MU)	(Rs Cr)	(Rs Cr)	(Rs Cr)
	<b>Central State Generating Stations</b>				
	<b>NTPC</b>				
I	ANTA	3	6	1	8
II	Auriya GPS	12	13	5	18
III	Dadri GPS	40	13	16	29
IV	Rihand STPS-I	211	18	30	47
V	Rihand STPS-II	271	21	38	59
VI	Unchahaar-I TPS	6	5	2	7
VII	Unchahaar-II TPS	63	11	23	34
VIII	Unchahaar-III TPS	39	7	14	21
IX	Dadri (Th)	48	7	18	26
X	Dadri (Th) II	46	10	20	29
XI	Kahalgaoon-I TPS	106	14	25	38
XII	Kahalgaoon-II TPS	339	37	75	112
XIII	Aravali	1523	700	584	1,284
XIV	Farakka	48	4	12	17
XV	Singrauli STPS	319	23	46	69
	<b>Total</b>	<b>3,074</b>	<b>890</b>	<b>908</b>	<b>1,798</b>
	<b>NHPC</b>				
I	Bairasul	9	2	1	2
II	Tanakpur	18	3	3	6
III	Chamera-I	64	4	8	11
IV	Chamera-II	50	6	5	11
V	Chamera-III	41	7	8	16

VI	URI	112	6	10	16
VII	URI II	71	8	13	22
VIII	Dhauliganga	57	5	8	13
IX	Sewa II	26	5	6	11
X	Dulhasti	75	14	20	34
XI	Parbati III	27	9	4	13
	<b>Total</b>	<b>549</b>	<b>70</b>	<b>87</b>	<b>157</b>
	<b>THDC</b>				
I	Tehri HPP	58	10	14	23
II	Koteshwar HEP	36	9	8	17
	<b>Total</b>	<b>94</b>	<b>18</b>	<b>22</b>	<b>40</b>
	<b>DVC</b>				
I	DVC (CTPS 7&8)	618	121	147	268
II	DVC (MTPS 6)	206	36	66	102
	<b>Total</b>	<b>824</b>	<b>158</b>	<b>213</b>	<b>370</b>
	<b>NPCIL</b>				
I	NAPS	112	-	35	35
II	RAPS	128	-	52	52
	<b>Total</b>	<b>240</b>	<b>-</b>	<b>87</b>	<b>87</b>
	<b>SJVNL</b>				
I	Naptha Jhakri	208	21	26	47



	<b>Total</b>	<b>208</b>	<b>21</b>	<b>26</b>	<b>47</b>
	<b>Others</b>				
I	Tala	24	-	5	5
II	Sasan, MP	399	6	48	54
III	CLP Jhajjar	474	82	179	261
IV	MPL	2,094	355	583	938
	<b>Total</b>	<b>2,991</b>	<b>443</b>	<b>815</b>	<b>1,258</b>
	<b>Total CSGS</b>	<b>7,980</b>	<b>1,600</b>	<b>2,158</b>	<b>3,759</b>

### **Renewable Power Purchase Obligation**

The Hon'ble Commission has notified the Delhi Electricity Regulatory Commission (Renewable Purchase Obligation & Renewable Energy Certificate Framework Implementation) Regulations, 2012 with effect from October, 2012.

Further the Hon'ble Commission in its Business Plan Regulation's 2019 for 4<sup>th</sup> MYT Control Period has notified the following RPO trajectory for DISCOM:

**Table 5.21: Targets for Renewable Power Purchase Obligation**

<b>Sr. No.</b>	<b>Distribution Licensees</b>	<b>FY 2020-21</b>	<b>FY 2021-22</b>	<b>FY 2022-23</b>
A	Solar Target	7.25%	<b>8.75%</b>	10.50%
B	Non Solar Target	10.25%	<b>10.25%</b>	10.50%
C	Total	17.50%	<b>19.00%</b>	21.00%

Based on above targets following RPO/REC cost has been considered for FY 21-22:

Table 5.22: RPO Compliance for FY 21-22

Sl. No.	Particulars	UoM	FY 21-22	
			Solar	Non Solar
A	Projected Energy sale for FY 2020-21	MU	8,177.42	
B	RPO target-Solar & Non Solar	%	8.75%	10.25%
C	RPO target -Solar & Non Solar	MU	715.52	838.19
D	RPO Compliance through	MU	840.47	481.95
	Purchase from TPDDL Solar	MU	2	
	Purchase from SECI Solar	MU	42	
	Purchase from SECI Solar 1	MU	346	
	Sunedison	MU	378	
	Net Metering- at Gross	MU	72.27	
	Purchase from Small Hydro	MU		99
	Purchase from DMSWL	MU		35
	SECI Wind 1	MU		175
	Purchase from TOWMCL	MU		50
	Cosmos Hydro	MU		39
	Taranda Hydro	MU		51
	SDMC @100%	MU		32
E	(Excess)/ Shortfall= (C-D)	MU	(124.95)	356.24
F	Inter head adjustment which can be done	MU		(125.73)
	Available inter-head quantum	MU		(124.95)
G	Requirement to be met through purchase of REC			231.29
H	Net Shortfall			231.29
I	REC rate + 12% GST	Rs/kWh		1.15
J	Cost for REC purchase	Rs Cr		26.60
	Total REC			26.60

**Power Procurement through NET Metering**

TPDDL would further like to submit that, TPDDL has already undertaken an assessment of roof top potential in its area and accordingly, the following is estimated:

<b>Solar Capacity</b>	<b>Target / Milestone FY 21-22</b>
Capacity in MW	55
Energy in MU	72.3

MU due to Net Metering Capacity addition has been calculated after assuming a CuF of 15%. Additionally the Petitioner would like to submit that with DMRC and other Open Access consumers pursuing open access from Renewable sources; the same would also add up to meeting of the RPO requirements of the Petitioner considering Discoms and Open access consumers as Obligated Entities. This shall reduce the RPO requirements to be met by the Petitioner on a stand-alone basis substantially as cumulative RPO met of obligated entities like the Petitioner and future expected open access consumers having substantial load like DMRC and other Open Access consumers shall add up the RPO mandates of the Hon'ble Commission.

**Table 5.23: Power Purchase from solar and non-solar generating stations**

<b>Sl. No.</b>	<b>Stations</b>	<b>Petitioner Share</b>	<b>Total Charge</b>
		<b>(MU)</b>	<b>(Rs Cr)</b>
A	Solar		
	TPDDL Solar	2	2
	SECI Solar	42	23
	SECI Solar2	346	93
	Sunedison	378	150
	Net Metering	39	21
	<b>Sub-Total</b>	807	289
B	Non Solar		
	SECI Wind 1	175	44
	TOWMCL	50	32

	Small Hydro	99	40
	DMSWL	35	25
	Cosmos Hydro	39	17
	Taranda Hydro	51	22
	SDMC @100%	32	18
	<b>Sub-Total</b>	<b>482</b>	<b>198</b>
	<b>Total</b>	<b>1,289</b>	<b>488</b>

### Short Term Purchase

Total short term purchase for FY 21-22 has been considered as below:

**Table 5.24: Projected Units purchase**

Other Sources	Projection FY 21-22		
	MUs	(Rs Cr)	Av. Rate
<b>Power Purchase from Other Sources</b>			
Inter-State Bilateral Purchase	<b>76</b>	<b>30</b>	<b>4.00</b>
Intra-State Power Purchase			
<b>Other Purchases Total</b>			

### Short Term Sale

Surplus unit: Based on the energy required at TPDDL periphery and Gross Power Purchased schedule to TPDDL, the surplus power available for sale is determined which shall be sold and the sale proceeds shall entirely go towards reducing the net power purchase cost charged to consumers.

Given below is the surplus power available for sale in FY 21-22:

**Table 5.25: Short Term Power Sale**

Source	Amount
Sale of Surplus Power – MU	-255.48
Revenue from Sale of Surplus Power	-76.64
Per unit Rate- Rs/kWh	3.00

### **Transmission Losses**

Transmission losses have been considered @ 3.50% for PGCIL & DTL as a whole.

Given below is the year on year projected transmission losses for FY 21-22:

**Table 5.26: Transmission Losses for FY 21-22**

Source	Mus
Inter-State Transmission	<b>(363.97)</b>
Intra-State Transmission (DTL)	
<b>Total Transmission Losses</b>	

Transmission Charges: year on year transmission charges including increase in transmission charges on account of new transmission lines/network required for enhanced renewable capacity which will get socialized amongst the transmission beneficiaries:

**Table 5.27: Transmission Charges (Rs Cr.) for FY 21-22**

Source	Amount
PGCIL Charges	701.34
DTL & SLDC Charges	287.74
Other Transmission charges, LDC charges. STOA Charges	1.47
<b>Total (excluding Pension Trust)</b>	<b>990.54</b>

\*STOA charges of Rs. 0.05/unit has been factored as a part of transmission cost

**Additional Impact due to CERC Tariff Regulations, 2019 on FGD**

Flue-gas desulfurization (FGD) cost has been considered FGD cost has been factored in the year as mentioned in the CPCB sheet. Increase in Variable Cost on account of FGD has already been factored in normal energy charges and Fixed charges has been considered separately as a part of Power Purchase Cost for FY 2020-21.

**Table 5.28: Additional Impact due to CERC Tariff Regulations, 2019 on FGD**

Source	2021-22	
	Fixed	Variable
NTPC Jhajjar	100.63	30.16
CLP Jhajhar	5.50	4.26
Dadri NCTPS(Th)	0.47	1.45
Dadri (Th.) Stage II	1.32	0.77
Maithon Long Term	18.67	18.85
Singrauli STPS	3.17	1.52
Rihand STPS-I	1.07	1.12
Rihand STPS-II	0.86	2.64
Sasan	2.65	2.79
Sub total	134.34	63.56
<b>Total</b>		<b>197.90</b>

**Normative Rebate**

CERC in its Tariff Regulations (2019-24) has reduced rate of normative rebate from the existing rate of 2% to 1.50%. However, the Hon'ble Commission has kept the normative rebate at 2% p.m. Therefore, normative rebate for the purpose of Power Purchase cost is computed in table below:

with you *20.10.2020*



**Table 5.29: Computation of Normative Rebate**

Gencos		Amount
		(in Rs Cr)
State Generating Stations		
Pragati	2.00%	3.91
Pragati III	1.50%	8.70
Central Generating Stations		
NTPC	1.50%	26.98
NHPC	1.50%	2.35
NPCIL	2.50%	2.17
Others	1.50%	25.75
Transmission		
DTL & SLDC	2.00%	5.75
PGCIL	1.50%	10.52
Total		86.13

**Energy balance for FY 21-22 is as follow:**

Based on all above submission, Energy balance for FY 21-22 is given below:

**Table 5.30: Energy Balance Summary and Power Purchase Cost for FY 21-22**

Sl. No.	Particulars	Energy MU	Amt	Rate Rs/unit
			Rs Cr	
A	Power from CSGS	7,980.00	3,758.59	4.71
B	Power from SGS	1,093.19	775.57	7.09
C	Short Term Power Purchase	75.86	30.34	4.00
D	RPO obligation to be met through purchase from renewable sources	1,289.02	487.92	3.79
E	RPO obligation to be met through purchase of REC		26.60	
F	FGD		197.90	
G	Arrears/Compensation		60.00	
	<b>TOTAL Purchase</b>	<b>10,438.08</b>	<b>5,336.92</b>	<b>5.11</b>
H	Transmission losses (Intra state & Interstate)	-363.97		
I	Transmission charges		990.54	
	<b>Total Purchase with Tx</b>	<b>10,074.11</b>	<b>6,327.46</b>	<b>6.28</b>
J	Less: Short Term surplus power sale	-255.48	-76.64	3.00
K	Less: Normative Rebate		-86.13	
	<b>Net Power Purchase Cost</b>	<b>9,818.63</b>	<b>6,164.64</b>	<b>6.28</b>

**Operation & Maintenance Expenses for FY 2021-22**

The Hon'ble Commission in its Business Plan Regulations, 2019 has notified norms for operation and maintenance expenses in terms of Regulation 4(3).

Based on the estimated average network capacity for FY 2021-22, the Petitioner is seeking O&M Expenses for FY 2021-22 as given in table below:

**Table 5.31: Approved O&M Expenses for FY 2021-22**

(Rs Cr)

Particulars	*Capacity as on	O&M Expenses Per Unit		O&M Expenses
	Average of FY 21-22			(Rs. Crore)
66 kV Line (kms)	1,106.08	Rs. Lakh/Ckt. Km	3.197	35.36
33 kV Line (kms)		Rs. Lakh/Ckt. Km		
11 kV Line (kms)	7,125.36	Rs. Lakh/Ckt. Km	0.971	69.19
LT Lines system (kms.)	7,550.86	Rs. Lakh/Ckt. Km	7.62	575.38
66/11 kV Grid sub-station (MVA)	5,135.96	Rs. Lakh/MVA	0.991	50.90
33/11 kV Grid sub-station (MVA)		Rs. Lakh/MVA		
11/0.4 kV DT (MVA)	6,257.50	Rs. Lakh/MVA	1.546	96.74
<b>Total (excluding impact of any statutory pay revision)</b>				<b>827.56</b>

It is further mentioned that the average capacity considered for computation of O&M expenses are subject to change based on actual capitalization.

Any statutory levies arising due to Government of India's Notification or Change in law but not factored in base year expenses shall be claimed separately over and above normative allowed expenses.

### 7<sup>th</sup> Pay Commission Impact

In addition to above, the Hon'ble Commission in its Business Plan Regulations has clearly specified that change in O&M expenses due to statutory requirement like 7<sup>th</sup> Pay Commission impact will be trued up on actual basis. In order to comply with the recommendations of Wage Revision Committee for disbursement of Interim Relief w.e.f. 01.01.2016 and for payment of other allowance w.e.f. 01-07-2017, which has been approved by the Govt. of NCT of Delhi, Department of Power vide their Order No. F.11(62)/2015/Power/Pt-I/2116 dated 26-07-2017. For the same, the Petitioner is seeking Rs 50 Cr on provisional basis over and above normative O&M expenses.

It is requested to the Hon'ble Commission to consider Land licensee fee and property tax on actual basis, as these are statutory levies/liability and uncontrollable in the hands of the Petitioner.

### Legal Expenses

The Hon'ble Commission in its "Statement of Reason on Business Plan Regulations 2019" has provided the treatment of Legal Expenses in its Explanatory Memorandum as follows:

*"(6) The Distribution Licensee may claim the legal expenses separately, subject to prudence check at the time of true up on submission of documentary evidence:*

*Provided that the legal expenses on account of cases filed against the Orders or Regulations of the Commission before any Court and the legal claims (compensation/penalty) paid to the consumer, if any, shall not be allowed."*

With respect to above, the Petitioner would like to mention that legal expenses incurred by the Petitioner shall be allowed without any distinction. Non allowance of some legal expenses amounts to curtailment of Statutory Right of the Petitioner to challenge the decisions of the Commission and is against the principle of natural justice as well the same is against Article 14 of the Constitution of India. The distribution business is a regulated business under the aegis of this Commission. The majority of issues in Distribution Business will arise out of orders/ directions issued by the Commission. In all such case, the Petitioner has right to



challenge the same before the Hon'ble Appellate Tribunal for Electricity and Hon'ble Supreme Court thereafter. The final Judgment passed at the Appellate stage will be binding on both the DISCOM as well as the Hon'ble Commission. Therefore, all legal expenses without any distinction should be allowed as an expense in the ARR.

The Petitioner request to the Hon'ble Commission to allow Rs 15 Cr. on adhoc basis in the ARR for FY 2021-22. The said amount shall be trued up based on prudence check of actual legal expenses.

**Table 5.31(a): Projected Normative O&M Expenses for FY 2021-22** (Rs Cr)

Particulars	O&M Expenses	Remarks
Normative O&M Expenses for FY 2021-21	827.56	Table 5.31
7 <sup>th</sup> Pay Commission Impact	50.00	
Legal Expenses	15.00	
<b>Total O&amp;M Expenses</b>	<b>892.56</b>	

**Capitalization for FY 2021-22**

The Hon'ble Commission in its Business Plan Regulations, 2019 has approved capitalization of Rs 443 Cr. for FY 2021-22 (excluding Rs. 50 Cr towards Capital Deposit). However the Petitioner would like to propose revised capitalization for FY 2021-22 as following:

**Table 5.32: Revised Capitalization for FY 2021-22**

( Rs Cr)

Particulars	Amount
Capitalization	288.08
Smart Meter	87.24
Total Capitalization without deposit work	375.32

It is worth to mention that deposit work is already treated as a part of capitalization, thus, gross capitalization for FY 2021-22 is considered as given below:

**Table 5.33: Capitalization considering Deposit work for FY 2021-22**

( Rs Cr)

Particulars	Amount
Capitalization without deposit work	288.08
Smart Meter	87.24
Deposit Work	50
<b>Total</b>	<b>425.32</b>

Considering the capitalization of Rs. 425.32 Cr, gross block of fixed assets for FY 2021-22 works out as follows:

Table 5.34: Capitalization of Fixed Assets

(Rs Cr)

Sl. No.	Particulars	Amount	Remark
A	Opening Balance for FY 20-21	5,919.92	Table 3.45
B	Projected Additions for FY 20-21	314.45	
C	Opening balance for FY 21-22	6,234.37	(A+B)
D	Addition during the year	425.32	Table 5.33
E	Deletion during the year*		
F	Closing Balance	6,659.69	(C+D)
G	Average Balance of Fixed Assets	6,447.03	((C+F)/2)

\*No deletion has been considered

### Contributions, Grants, subsidies towards cost of Capital Assets

The contribution towards cost of capital assets is transferred to sources of funds in the balance sheet when the assets for which such contribution is received are capitalized. It is estimated that Rs 50 Cr will be capitalized towards consumer contribution for FY 21-22 and thereafter.

Table 5.35: Estimated Consumer Contribution capitalized

(Rs Cr)

Sl. No.	Consumer Contribution/Grant	Amount	Remarks
A	Opening Balance for FY 20-21	900.94	Table 3.46
B	Projected Additions for FY 20-21	32.50	As per Tariff Order Para 4.142 for FY 20-21
C	Opening balance for FY 20-21	933.44	(A+B)
D	Capitalized during the year	50	
E	Closing Balance	983.44	(C+D)
F	Average Cumulative Capitalized Consumer Cont.	958.44	(C+E)/2

**Depreciation and Provision of Depreciation**

The Hon'ble Commission in its 4<sup>th</sup> MYT Regulation's has followed same methodology for allowance of Depreciation as in 3<sup>rd</sup> MYT Regulations. Based on the said regulations the Petitioner has changed depreciation rate in its books of account. Thus, for the purpose of computation of Deprecation for FY 2021-22, the Petitioner has considered Deprecation rate of 5.04% equivalent to the rate considered for True up of FY 19-20.

**Table 5.36: Revised Depreciation for FY 2021-22**

			(Rs. Cr)
Sl. No.	Particulars	Amount	Remark
A	Opening GFA	6,234.37	Table 5.34
B	Net Additions to Asset during the year	425.32	Table 5.33
C	Closing GFA	6,659.69	
D	Average GFA	6,447.03	
E	Less: Average Consumer Contribution	958.44	Table 5.35
F	Average GFA net of CC	5,488.59	
G	Average rate of depreciation	5.04%	Table 3.47 of True Up
H	Depreciation for the year	276.40	
I	Opening Depreciation	2,080.72	Table 3.49 of True Up
J	Closing Depreciation	2,357.12	
K	Average Depreciation	2,218.92	

**Working Capital Requirement**

The Petitioner has computed working capital requirement as per Regulation 84 (4) Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2017. The relevant extract of the Regulation is as follows:

"84. The Commission shall calculate the Working Capital requirement for:

(4) Distribution Licensee as follows:

with you *May 2022*



(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 costs for one month;

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

Based on the above formula computation of working capital is given below:

**Table 5.37: Computation of Change in Working Capital**

(Rs Cr)

Change in Working Capital					(Rs Cr)
Sl. No.	Particulars	Amount		Remark	
		FY 21-22			
A	Annual revenues requirement	8,338.01		Table 5.44	
B	Receivables equivalent to 2 months ARR		1,389.67	A/12*2	
C	Power Purchase expenses	6,164.68		Table 5.30	
D	Add: 1/12th of power purchase expenses		513.72	C/12	
E	Total working capital		875.94	B-D	
F	Opening working capital		460.09	Table 3.50 of True Up	
G	Change in working capital		415.86	(E-F)	

### **Means of Finance for Capitalization for FY 2021-22**

The Petitioner has submitted that Regulation 63 of the Tariff Regulations, 2017, provided that for determination of Tariff, the debt-equity ratio for any project or scheme under commercial operation shall be considered as 70:30.

Table 5.38: Means of Financing (Rs Cr)

Sl. No.	Particulars	Amount	Remarks
A	Capitalization	425.32	Table 5.36
B	Less- Consumer Contribution Capitalized during the year	50.00	Table 5.35
C	Funding Requirement	375.32	
D	Through- Debt @ 70%	262.72	
E	Through Equity @ 30%	112.60	

### Regulated Rate Base

Regulations 65 to 71 of the Tariff Regulations, 2018 deals with the methodology for determination of Regulated Rate Base (RRB), Weighted Average Cost of Capital (WACC) and computation of Return on Capital Employed (ROCE).

Regulation 66 of the Tariff Regulations 2017 provided that *"The Regulated Rate Base (RRB) shall be used to calculate the total capital employed which shall include the Original Cost of Fixed Assets (OCFA) and Working Capital. Capital work in progress (CWIP) shall not form part of the RRB. Accumulated Depreciation, Consumer Contribution, Capital Subsidies / Grants shall be deducted in arriving at the RRB."*

Based on the approved capitalization and corresponding deprecation thereon, estimated consumer contribution and estimated working capital requirement as computed above, computation of Regulated Rate Base for FY 2021-22 is given below:

Table 5.39: Computation of Regulated Rate Base (Rs Cr)

Sl. No.	Particulars	Amount	Remarks
A	Opening Balance of OCFA	6,234.37	Table 5.34
B	Opening Balance of Accumulated Depreciation	2,080.72	Table 5.36
C	Opening Balance of Accumulated Consumer Contribution	933.44	Table 5.35
D	Opening balance of working capital	460.09	Table 5.37
E	<b>RRB – Opening</b>	3,680.29	
F	Capitalization during the year	425.32	Table 5.36
G	Depreciation for the year (Including AAD)	276.40	Table 5.36

H	Consumer Contribution, Grants,	50.00	Table 5.38
I	Change in Working Capital	415.86	Table 5.37
J	<b>ΔAB (Change in Regulated Base)</b>	465.31	
K	<b>RRB – Closing</b>	3,363.35	
L	<b>RRB(i)</b>	4,145.61	

### **Computation of WACC**

The Hon'ble Commission in its Business Plan Regulations, 2019 has approved Rate of Return on Equity computed at base rate of 14% on post-tax basis for wheeling business and base rate of 2% on post-tax basis for retail business.

Further, Based on the 6 months actual cost of debt for capex loans @ 8.31% & working capital rate of interest of 7.54%, the weighted average rate of interest on loans (Capex & working capital) has been considered @ 8.04% for FY 2021-22.

Considering the above cost of debt and rate of return on equity, weighted average cost of capital has been computed by considering the average actual equity and average actual debt (net of repayment) for FY 2021-22.

**Table 5.40: Weighted Average Cost of Capital (WACC) sought for FY 2021-22**

Sl. No.	Particulars	Amount	Remark
A	Equity	1,615.12	
B	Debt- Capex	1,654.54	
	Debt- working capital	875.94	
C	Return on Equity	16%	
D	Income Tax Rate	16.83%*	
E	Grossed up Return on Equity	19.24%	
F	Rate of Interest	8.04%	
G	Weighted Average Cost of Capital	12.40%	

\* It is requested to the Hon'ble Commission to consider actual applicable income tax rate at the time of approving ARR for FY 21-22, as for sake of convenience the Petitioner has considered effective rate of FY 19-20.

Considering the above computed WACC of 12.40% the Petitioner has computed ROCE for FY 21-22 as follows:

**Table 5.41: Computation of Return on Capital Employed (Rs Cr)**

Sl. No.	Particulars	Amount	Reference
A	RRB (I)	4,145.61	Table 5.39
B	WACC	12.40%	Table 5.40
C	Return on Capital Employed	514.25	(A*B)

### **Non-Tariff Income**

The Petitioner has kept Non-tariff income for FY 2021-22 at the same level i.e. Rs 85.36 Cr , as offered for truing up for FY 2019-20 , in line with the methodology followed by the Hon'ble Commission in past.

**Table 5.42 Non-Tariff Income (Rs Cr)**

Sl. No.	Particulars	FY 2021-22
A	Non-Tariff Income/Interest on Security Deposit	85.36
B	Additional Open Access charges	
C	Total	

### **Computation of Carrying cost Rate**

The Hon'ble Commission has approved Return on Equity in terms of Regulations 2(16) of the DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017 for computation of weighted average rate of interest for funding of Regulatory Assets/ accumulated Revenue Gap through Debt and Equity shall be considered at 14% on pre-tax basis in its Business Plan Regulations, 2019.

Further, the rate of interest at 8.35% for FY 2021-22 for funding revenue gap has been considered.

Based on the above, the carrying cost rate for FY 2021-22 computed as follows.

**Table 5.43: Computations of carrying cost**

Sl. No.	Particulars	FY 2021-22
A	Rate of Return on Equity	14.00%
B	Rate of Interest on Loan	8.35%
C	Rate of Carrying Cost	10.05%

### **Computation of Aggregate Revenue Requirement**

Based on the submission made above the total Aggregate Revenue Requirement for the FY 2021-22 comes to Rs. 8,337.17 Cr. Component wise breakup of the same is given below:

**Table 5.44: Summary of Aggregate Revenue Requirement**

(Rs Cr)

Sl. No.	Particular	FY 2021-22	Remarks
		Amount	
A	Cost of Power Purchase	6,164.68	Table 5.30
B	O&M Expenses	892.56	Table 5.31
C	Depreciation	276.40	Table 5.36
D	Return on Capital Employed	514.25	Table 5.41
E	Carrying Cost	575.47	Table 5.46
F	Less: Non-Tariff Income/ Interest on consumer security deposit	85.36	Table 5.42
H	<b>Annual Revenue Requirement</b>	<b>8,338.01</b>	

**Revised computation of Revenue (Gap)/surplus without carrying cost & DRS for FY 2021-22**

Based on the above submission, the Petitioner has estimated Revenue Gap of Rs. 1,108.84 Cr for FY 2021-22.

**Table 5.45 Computations of Revenue (Gap) for the year (Rs. Cr)**

Sl. No.	Particular	FY 2021-22	Remarks
		Estimated	
A	Aggregate Revenue Requirement for the year without carrying cost	7,762.54	Table 5.44
B	Revenue available for the year without DRS	6,653.64	Table 5.16
C	Revenue (Gap)/surplus for the year	(1,108.89)	(B-A)

**Computation of Additional Revenue Gap for FY 2020-21 to compute the Opening Revenue Gap for FY 2021-22**

The Petitioner has submitted provisionally computed closing revenue gap of Rs. 3,810.05 Cr upto FY 2019-20 in true up for FY 2019-20. However for the purpose of computation of carrying cost for FY 2021-22 (i.e. component of Aggregate Revenue Requirement), the opening revenue gap for FY 2021-22 is required to be computed.

Thus, for this purpose, the Petitioner considers the estimated revenue surplus of Rs 12 Cr as computed by the Hon'ble Commission for FY 2020-21 and further adjusted the said revenue gap/surplus on account of following variations/ reasons.

with you *Non-Stop*



Computation of Additional Revenue Gap for FY 2020-21 is given below:

**Table 5.46: Additional Revenue Gap for FY 20-21**

Sl. No.	Particular	FY 20-21	Remarks
		Amount as approved * Rs Cr.	
	Total approved ARR for FY 2020-21	6,383.18	Table 5.9 of TO 2020-21
	Estimated Revenue available for FY 2020-21	6,395.00	
	<b>Revenue (Gap)/Surplus*</b>	<b>12</b>	
	<b>Adjusted on account of</b>		
	Power Purchase Cost (Note No 1)	(615.78)	Due to Arrears bills + REC impact etc.
	O&M Expenses (Note no 2)	(80.29)	Balance of normative O&M expenses not factored at the time of issuance of TO 2020-21
	Additional O&M expenses (Note No 3)	(20.25)	
	Additional Impact on ROCE	0	Kept at same level, as issue is challenged before APTEL
	Carrying Cost Impact (Note No 4)	<b>(363)</b>	
	Difference in Revenue Available	<b>(297)</b>	
	Revised Revenue Gap / surplus for the year^	<b>(1364)</b>	

\* Approved in Tariff Order for FY 2020-21

^ Estimated Figures and subject to change at the time of True up

### **Note No 1: Power Purchase Cost**

The Hon'ble Commission in its Tariff Order for FY 2020-21 has projected gross power purchase cost/unit @ Rs. 5.42. {i.e. (Rs Cr – 4819.23+73.29)/9030 MUs}. Against the same, based on 7 months actual power purchase cost, it is estimated that for FY 2020-21, Gross Power

Purchase Cost/unit would be approx. @ Rs. 6.10/unit. Thus, resulting into increase in power purchase cost of the petitioner for FY 2020-21.

Computation of additional impact on Revenue Gap due to increase in Power purchase cost is given in table below:

**Table 5.47: Additional Revenue Gap due to Power Purchase**

Sl. No.	Particular	FY 20-21	Remarks
		Amount as approved * Rs Cr.	
A	Estimated Energy Input at Delhi Periphery (MU)	9030	Table 4.42 of TO 2020-21
B	Gross Power Purchase Cost/ units – Rs/kWh	5.42	
C	<b>Revised Estimated Power Purchase Cost/unit – Rs /Kwh</b>	<b>6.10</b>	
D	<b>Additional Impact of increase in cost – Rs Cr</b>	616	
E	Less- Additionally Recovery of increased power purchase cost through PPAC – Rs Cr.		
F	Estimated amount unrecovered for FY 2019-20 – Rs Cr	616	
G	<b>Reason for Increase</b>		
H	Less Generation has been considered from ISGS stations and the same has been considered to be procured from short term purchase	511	
I	Energy available from Stations based in Delhi and associated cost	(27)	
J	Power Purchase Rebate (Billing Rebate)	0	
K	Transmission charges including STOA Charges	134	
L	Surplus Energy	(86)	
M	Impact of RE certificates	(42)	
N	Bill Discounting & FGD amount	78	
O	Due to difference between DERC VS Estimated actuals projection	46	
P	Total	616	

**Note No 2: Normative O&M Expenses**

The Hon'ble Commission in its Tariff Order for FY 2020-21 has provisionally allowed an amount of Rs 695.42 Cr against the total normative O&M allowance of Rs 775.71 Cr. (i.e. provisional basis 90% of Opening network capacity and 65% of capitalization for the year O&M expenses are considered). Relevant extract of the Tariff Order is given below:

*"4.125 The Commission observed that the Petitioner has projected the network capacity on higher side. Further, because of the outbreak of COVID-19 pandemic, the network utilisation is expected to be reduced this year resulting in to lower O&M expenses. Further, the O&M Expenses are linked with the network capacity of the DISCOM. Accordingly, the Commission has considered 90% of the network capacity as on 31/03/2020 of the Petitioner and 65% of the claimed Capitalization for FY 2020-21 (discussed in detail in the relevant section) and has provisionally allowed O&M expenses of the Petitioner. The true-up of O&M expenses shall be as per actual network capacity."*

Thus, for the purpose of computation of additional impact the said balance O&M expenses of Rs 80.29 Cr (i.e. Rs. 775.71 Cr- Rs. 695.42 Cr) is considered additionally.

**Note No 3: Additional O&M expenses**

The Petitioner is seeking an additional O&M expenses of Rs. 20.25 Cr over and above the normative O&M expenses. These expenses are due to impact to COVID-19 and legal expenses. Thus, the petitioner now considered additional impact of Rs. 20.25 Cr. for FY 2020-21 towards O&M expenses to meet its liability.

**Note No 4: Carrying Cost Impact**

The Hon'ble Commission in its Tariff Order for FY 2020-21 has computed carrying cost of Rs 96.63 Cr. in Table no 4.68, considering average revenue gap of Rs 943.58 Cr. However, against the same, the Petitioner has computed carrying cost of Rs 459.54 Cr. for FY 2020-21. Computation of the same is given below:

**Table 5.48: Additional Carrying cost for FY 20-21**

Sl. No.	Particular	FY 20-21	Remarks
		Amount as approved * Rs Cr.	
A	Opening Revenue Gap as per true up Petition for FY 2020-21	(3,810.05)	Table no 3.67
B	Addition for the year	(1,364.39)	As computed above
C	Closing Revenue Gap	(5,174.44)	(A+B)
D	Average Revenue Gap	(4,492.25)	(A+C)/2
E	Carrying cost @ 10.24%	(460.01)	
F	Less- already considered by the Hon'ble Commission	96.63	Tariff Order July'20
G	Additional impact	(363.38)	(E-F)

with you *Mr. Singh*



**Computation of Closing Revenue Gap (on Provisional basis) along with Carrying Cost upto FY 2021-22**

For the FY 2021-22, the Petitioner has estimated an amount of Rs 512.70 Cr towards 8% Deficit recovery surcharge and thereafter adjusted the said amount against the total of closing revenue gap for the year.

The summary of addition in opening Revenue Gap along with carrying cost (net of 8% Deficit Recovery Surcharge) is given below:

**Table 5.49: Computations of Closing Revenue Gap (Rs. Cr)**

Sl. No.	Particular	FY 2021-22	Remarks
		Estimated	
A	Opening Revenue Gap	(3,810.05)	
	Add- Projected Revenue Gap for FY 20-21	(1,364.39)	
B	Opening Revenue Gap	(5,174.44)	(A+B)
C	Revenue (Gap)/Surplus for the year	(1,108.89)	Table 5.45
D	Closing Revenue (Gap)	(6,283.34)	(C+D)
E	Carrying Cost Rate	10.05%	Table 5.43
F	Carrying Cost	(575.47)	(C+E/2)*F
G	Recovery of carrying cost from 8% Deficit Revenue Recovery Surcharge	512.70	Table 5.15
H	Closing Revenue Gap (including carrying cost)	(6,346.11)	



## **COST OF SERVICE**

The Petitioner has considered same approach for determining the cost of supply for different voltage levels as adopted by the Hon'ble Commission in its Tariff Orders.

The total ARR has been allocated in the Wheeling and Retail Supply business to different voltage levels and the same has been considered along with the energy sales to the respective voltage level to arrive at the per unit Wheeling charge and Retail Supply Charge for that voltage level.

## **ALLOCATION OF WHEELING ARR**

The Petitioner has considered the gross energy sales (MU) for the FY 2021-22 and has allocated the same to different voltage levels in the proportion of energy sales (MU) to these voltages to total sales. The voltage wise estimated energy sales for FY 2020-21 is as shown in the following table:

**Table 6.1: Estimated Energy Sales for FY 2021-22 (MU)**

Particulars	MUs
Sales above 66 kV level	158.42
Sales at 33/66 kV level	76.04
Sales at 11 kV level	980.42
Sales at LT level	7,837.89
<b>Total</b>	<b>9,052.78</b>

The Petitioner has thereafter grossed up the energy sales (MU) at the specific voltage level with the respective distribution losses (%) at that level to arrive at the Energy Input (MU) for that level. The summary of the voltage wise distribution losses considered by the Commission are as follows:

**Table 6.2: Estimated Distribution Loss for FY 2021-22 (%)**

Particulars	%
Loss above 66 kV level	0.00%
Loss at 33/66 kV level	0.78%
Loss at 11 kV level	2.63%
Loss at LT level	8.61%
Average Loss	7.80%

The Petitioner would like to mention that the voltage wise distribution losses considered above are estimates and based on same the Energy Input (MU) for the respective voltage levels are shown as follows:

**Table 6.3: Estimated Energy Input for FY 2021-22 (MU)**

Particulars	MUs
Input for 66 kV level	158.42
Input for 33/66 kV level	76.64
Input for 11 kV level	1,006.90
Input for LT level	8,576.67
<b>Total</b>	<b>9,818.63</b>

Based on the ratio given in Business Plan Regulations, 2019 Wheeling ARR for FY 2021-22 is computed as below:

Wheeling Business	Ratio	Amount in Rs Cr.
<b>Particulars</b>		
<b>A</b> O&M Expenses	62%	553.39
<b>B</b> Depreciation	77%	212.83
<b>C</b> ROCE	72%	370.26
<b>D</b> Carrying cost	14%	80.57
<b>E</b> Non Tariff Income	40%	34.14
<b>F Total Wheeling ARR</b>		<b>1,182.90</b>

The Wheeling ARR for the year has been apportioned in proportion of the energy input at different voltage levels. The wheeling cost allocated to different voltage levels is tabulated as follows:

**Table 6.4: Wheeling cost for different voltages for FY 2021-22 (Rs. Cr)**

Particulars	Amount
Above 66 kV level	19.07
At 33/66 kV level	9.23
At 11 kV level	121.23
At LT level	1033.27
<b>Total</b>	<b>1182.90</b>

Based on the energy sales at the respective voltage levels the Petitioner has determined Wheeling Charge per unit for different voltages for FY 2021-22 as follows:

**Table 6.5: Wheeling Charges for FY 2021-22 (Rs/Unit)**

Particulars	Rs-kWh Per unit
Above 66 kV level	1.20
At 33/66 kV level	1.21
At 11 kV level	1.24
At LT level	1.32
<b>Average</b>	<b>1.31</b>

## ALLOCATION OF RETAIL SUPPLY ARR

Based on the ratio given in Business Plan Regulations, 2019 Wheeling ARR for FY 2021-22 is computed as below:

Retail Business		Ratio	Amount in Rs Cr.
	<b>Expenditure</b>		
<b>A</b>	Power Purchase Cost	100%	6,164.68
<b>B</b>	O&M Expenses	38%	339.17
<b>C</b>	Depreciation	23%	63.57
<b>D</b>	ROCE including Tax	28%	143.99
<b>E</b>	Carrying Cost	86%	494.90
<b>F</b>	NTI	60%	51.22
<b>G</b>	<b>Total Retail Business ARR</b>		<b>7,155.11</b>

The Petitioner has allocated the Retail Supply ARR in the ratio of energy input determined above for different voltage levels. The Petitioner has thereafter determined the Retail Supply charge for a particular voltage level by considering energy sales at that voltage level. The summary of Retail supply ARR Allocation to different voltage levels for FY 2021-22 is given as follows:

**Table 6.6: Retail Supply cost for different voltages for FY 2021-22**

**(Rs. Cr)**

Particulars	Amount
Above 66 kV level	115.45
At 33/66 kV level	55.85
At 11 kV level	733.75
At LT level	6,250.05
<b>Total</b>	<b>7155.11</b>

Based on the energy sales at the respective voltage levels, the Petitioner has determined retail supply charges per unit for different voltages for FY 2021-22 as follows:

**Table 6.7: Retail Supply Charges at different voltages for FY 2021-22 (Rs/Unit)**

Particulars	Rs-kWh/unit
Above 66 kV level	7.29
At 33/66 kV level	7.34
At 11 kV level	7.48
At LT level	7.97
<b>Average</b>	<b>7.90</b>

The cost of supply determined by the Commission for the different voltage levels is shown as follows:

**Table 6.8: Tariff at different voltages for FY 2021-22 (Rs/Unit)**

Particulars	Rs-kWh/unit
Above 66 kV level	8.49
At 33/66 kV level	8.56
At 11 kV level	8.72
At LT level	9.29
<b>Average</b>	<b>9.21</b>



# Tariff Rationalization

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## Measures for Tariff Rationalization

At the outset, TPDDL wishes to clarify that while proposing tariff rationalization measures, the intention is not to earn net extra revenue in the process but to make structure simpler, balanced, Consumer friendly and more realistic.

TPDDL, would, therefore, request the Hon'ble Commission to determine Tariff structure in such a manner that the impact on the total revenue requirement merely on account of the rationalization is 'Nil', and allow such revenue to meet the approved expenditure of the Licensee.

TPDDL proposals on "Tariff Rationalization" are as follows:

### 1. Time Bound Recovery of Regulatory Assets / Revenue Gap

The Hon'ble Commission since its tariff order dated 13<sup>th</sup> July 2012 and till date has allowed for an additional surcharge of 8% **towards recovery of past accumulated deficit /regulatory assets.**

It is pertinent to mention that the said surcharge is not sufficient to ensure recovery of entire Revenue Gap in stipulated timeframe.

We would further like to draw your kind attention to the Judgment dated 11<sup>th</sup> Nov 2011 in OP No. 1 of 2011 of Hon'ble Appellate Tribunal for Electricity (APTEL) regarding *Tariff Revision (Suo-Moto action on the letter received from Ministry of Power)* where-in the Hon'ble APTEL has emphasized on timely recovery of regulatory assets.

The relevant observation of the Hon'ble Tribunal in the said matter is as under:

**"65 (iv).....The recovery of the Regulatory Asset should be time bound and within a period not exceeding three years at the most and preferable within Control period. Carrying Cost of the Regulatory Asset should be allowed to utilities in the ARR of the year in**

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*which the Regulatory Assets are created to avoid problem of cash flow to the Distribution Licensee."*

The concern on creation of regulatory assets in future and the need for timely liquidation of the Regulatory has also been emphasized in the National tariff Policy. The relevant extracts have been reproduced below:

*"8.2.2 The facility of a regulatory asset has been adopted by some Regulatory Commissions in the past to limit tariff impact in a particular year. This should be done only as a very rare exception in case of natural calamity or force majeure conditions and subject to the following:*

- a. Under business as usual conditions, no creation of Regulatory Assets shall be allowed;*
- b. Recovery of outstanding Regulatory Assets along with carrying cost of Regulatory Assets should be time bound and within a period not exceeding seven years. The State Commission may specify the trajectory for the same."*

It may be appreciated that the major part of the regulatory asset has been hovering on the petitioner for more than 10 years and recovery of the high accumulated gap continues to remain a concern for the financial health of the Petitioner, given that there is no clear roadmap stipulated for recovery of the same.

Credit rating agency ICRA in its last rating has also expressed his concerns on the liquidation prospects of regulatory assets. Even a one notch down in credit rating from existing level will impact our interest rate by around 70-90 basis points. Also, absence of clear cut roadmap for the liquidation of regulatory asset severely impacts the future lending rates. Therefore, an early amortization of such huge built up Revenue Gap would further help in sustenance of the current credit rating of the Petitioner, ultimately resulting into lower cost of debt and saving of the carrying cost in the benefit of the consumers.

The Hon'ble Commission is requested to give an amortization schedule with annual recovery of the accumulated Revenue Gap along with Carrying Costs and impact of true up of previous year may be allowed in the ARR & Tariff of subsequent year to avoid further accumulation of Regulatory Asset.

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## **2. Revised Power Purchase Cost Adjustment Charge (PPAC) Formula**

The Petitioner once again would like to draw the attention of the Hon'ble Commission on existing Power Purchase Adjustment Charge (PPAC) Formula. It is worth to mention that the power purchase adjustment mechanism is to ensure that the impact of change in power purchase cost of the Distribution Companies is passed on to the consumers in a timely manner on a quarterly basis.

The main short comings of said PPAC Formula is that it factors only the variance in Long Term power purchase cost (Generation and Transmission) and not the variance in sale rate (which is also a part of power purchase cost). Accordingly, the Hon'ble Commission is requested to in-corporate the suggestion so that any gain/loss on account of sale of surplus power may also be allowed in a timely manner. The same will ensure timely recovery/adjustments on a quarterly basis and prevent doing the same at the end of the year at the time of true-ups which will result in savings of carrying cost burden on consumers.

**It will also ensure that in the situation when the sale rate is more than the approved base cost, PPAC may not get computed/ may get nullified on account of increase in Fuel charges/ Transportation costs.**

To remove the above shortcoming, Tata Power-DDL in its previous year tariff Petitions has also suggested revised PPAC formula to the Hon'ble Commission. It is further submitted that the Hon'ble APTEL in its Judgment in Appeal no 177 & 178 of 2012 has directed the State Commission to consider the variation in sale price of surplus power in the PPAC formula. Relevant extract of the same is given below:

*"The Hon'ble Tribunal agreed with the prayer of the Appellant that Power sales constitute a major component of power purchase cost and the power purchase cost is trued up only after 2 years, putting additional burden on consumers by way of interest charges which have to be borne by the consumers additionally. The Hon'ble Tribunal agreed that any short term power*

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*purchase due to unforeseen outages would require prudence check. Keeping in view small amount of short term power procurement cost, the Hon'ble Commission may not include short term power procurement in PPAC.*

***However, the Hon'ble Tribunal also agreed that Sale of short term power is volatile and may vary from what has been considered in determining the net power purchase cost in ARR. Therefore, State Commission should have considered the variation in sale price of surplus power in the PPAC formula."***

The Hon'ble Commission in its previous Tariff Order dated September 2015 in para no 3.37 on page no 141 has mentioned that

*"The observation of Hon'ble APTEL in Appeal 177 & 178 of 2012 regarding PPAC formula will be taken into consideration while formulating PPAC formula in next MYT Control period."*

However, the same has yet not been considered by the Hon'ble Commission.

Based on the above facts, the Petitioner is once again reproducing the revised formulae for PPAC.

***Proposed Formula for consideration is suggested as below:***

$$\text{PPAC of nth Qtr. (\%)} = (A * C) - (B * F) + (D - E)$$

$$\{Z * (1 - \text{Distribution Losses in \%}/100)\} * ABR$$

***Where,***

***A = Total units procured in nth Qtr. (in kWh) from power stations having long term PPAs - to be taken from the bills of Gencos issued to distribution licensees***

***B = Actual units sold in (n)th quarter.***



$$C = C_{\text{actual}} - C_{\text{projected}}$$

**C actual** = Actual average Power Purchase Cost (PPC) from power stations having long term PPAs in (n)th Qtr. excluding fixed cost of regulated stations (Rs./kWh).

**C projected** = Projected average Power Purchase Cost (PPC) from power stations having long term PPAs including new long term PPAs Added and excluding regulated stations / surrendered stations (Rs./kWh) (from tariff order) (Base Rate)

Regulated/Added/Surrendered stations to be taken from SLDC/DERC. DISCOMs will provide audited figures for not paid stations.

**D** = Actual Transmission Charges paid in the nth Qtr

**E** = Base Cost of Transmission Charges for nth Qtr= (Approved Transmission Charges/4) (no change)

**F (new)** = Actual average Power Sale Rate in the nth Qtr. (Rs./kWh) – Projected Average Sale Rate by DERC (from tariff order)

**Z** =  $\{[(\text{Long term Mus from CGS stations} * \text{PGCIL losses \%}) + \text{Long term Mus from Delhi Gencos}] * \text{DTL Losses \%}\} - B$

**ABR** = Average Billing Rate for the year (to be taken from the Tariff Order)

**Distribution Losses (in %)** = Target Distribution Losses (from Tariff Order)

**PGCIL Losses (in %)** = As mentioned/ computed from Tariff order.

**DTL Losses (in %)** = As mentioned/ computed from tariff order.



**3. Upward revision in Credit Card / Debit Card Payment Limit**

Recently, Ministry of Power, Govt. of India vide D.O. letter no. 1/10/2016-IT dated 09.12.2016 issued direction regarding digital cashless transaction in country. The clause (b) of MoP, Govt. of India in the said matter is as under:

b) *All convenience fee/charges for digital payment should be waived from customer.*

In view of above direction, the Hon'ble Commission is requested that no processing fee should be charged from customer for payment through credit card / debit card/online payment irrespective of bill amount and same should be pass through in ARR on actual Basis.

**4. Cash transaction for theft bills**

The Hon'ble Commission has directed that the DISCOMs shall not accept payment from its consumers at its own collection centres/mobile vans in cash towards electricity bill exceeding Rs. 4000/- except from blind consumers and for court settlement cases or any other cases specifically no revenue collection above Rs.4,000/- should be collected through cash for theft charges.

In this regard, it is pertinent to mention that the Petitioner is facing certain problems in collection of theft bills in the mode other than cash. Following are some area of concerns which requires the immediate attention of the Hon'ble Commission in order to comply with the said directive:

- a) Most of the theft cases are presently detected in JJ clusters and rural areas/villages where the consumers do not always have bank accounts to issue cheques.
- b) Even if applied, acceptance of cheques itself poses problems of bounced cheques and further requirements of notices and litigation under Negotiable Instruments Act.

- c) Recovery in theft cases is very difficult and there are frequent defaults. A very large number of consumers of JJ Clusters and villages seek installments for payments and there is lot of default and such consumers are less educated. Asking such persons to go to banks for preparation of drafts every month (due to installments) will be a strong dissuading factor and would involve inconvenience, extra formalities, delays and loss of work for such consumers.
- d) Private banks do not issue drafts unless the applicant has an account with the bank and the public sector banks require PAN No. for transactions above Rs.50,000/-. The consumers of such areas would not be able to meet such requirements.
- e) The Hon'ble Commission has issued the direction mainly due to an apprehension of cash collection without issuing receipts. The Petitioner follows a SAP based transparent process of recovery and unless a bill is issued, no payment can be accepted. Also, payment of only exact amount of the installment bill can be accepted and no one can make or accept any payment less or more than the amount of the bill. Therefore, there is absolutely no possibility of any collection without being accounted for in SAP or without issuing receipts. Both the activities of accounting for and issuing receipts are instant. Also, collections of theft bills are not carried out through any contractor or commission agent and all payments have to be made only at the collection counters of the company. The Petitioner further assures to the Hon'ble Commission that neither such transactions are carried out nor any such transactions is possible.
- f) Even The Hon'ble Commission in past has considered and issued direction to DISCOMS vide letter No. F.3(427)/Tariff fin/DERC/2015-16/13784 dated 22/01/2016 to comply the direction issued by Hon'ble Special Electricity Court, Rohini in Case No. 652/14 dated 31/3/2015 to accept the cash payment towards theft Bill.

For the reasons cited above, the Hon'ble Commission may kindly exempt/exclude theft collections transactions from the said directive.



**5. Penalty (ADSM – Additional Deviation Settlement Mechanism) on account of transmission line tripping**

Under the Deviation Settlement Mechanism and Related Matters Regulations 2014; subsequent amendments thereof, effective from 17.02.2014, the Hon'ble CERC has assigned the responsibility of maintaining the grid discipline on the Buyers and Sellers only. It however needs to be noted that there are certain factors which are not under the control of the sellers/buyers but under the direct control of Transmission Utility and concerned Load Dispatch Centres. These mainly include tripping of transmission system and scheduling of power within time blocks as specified under IEGC regulations and subsequent amendments thereof. By their inherent nature, a tripping or fault cannot be predicted. Also as the fault has occurred in a system not maintained by the DISCOM/Buyer, the DISCOM/Buyer cannot take any action to reduce them by predictive or preventive maintenance. Therefore, any ADSM charges/penalty on account of the same should be made pass through in the ARR of the DISCOM and the DISCOM should not be held liable for any under-drawal on account of any unforeseen failure of a CTU or STU equipment, which resulted in such under-drawal and may be excluded from liability in case of such events. Alternatively the DSM penalty imposed upon DISCOMs on account of transmission line tripping be imposed upon the STU as DISCOMs have no direct control over issues related to transmission line/ equipment tripping. On similar lines if schedule implementation is not done as per the mandate in IEGC by RLDC/ SLDC; DISCOM/buyer should not be made liable for the same.

**6. Levy of penalty on Harmonics and installation of PQ meters by HT/EHT consumers**

Power Quality is an area of growing concern for end users as well utilities due to their financial impact and health of equipment's. The characteristics of loads and the requirements of electrical systems have been changing continuously. With the increasing penetration of renewables, the proliferation of electric vehicles and charging facilities and the rise of decentralized generation, the stress on the transmission and distribution grid has increased manifold. Presently, the awareness for power quality parameters and its impact on the

network as well as load is very low. There is severe lack of data afflicting both utility as well as consumers.

The presence of harmonic distortion is highly detrimental to the health of electrical network. Current harmonics in the system are invariably produced by nonlinear loads of the consumers such as speed drives, LEDs, SMPS, arc furnaces, welding loads, data processing equipment of the consumers and causes power pollution. Further, Harmonic causes increased system losses, interference with communication lines, errors while indicating electrical parameters, probability to produce resonant conditions, etc. The main sources of harmonic distortion will ultimately be end-user loads only. The harmonic currents passing through the impedance of the system cause a voltage drop for each harmonic. Thus, harmonic current distortion leads to voltage distortion. When several power users share a common power line, the voltage distortion produced by harmonic current injection of one user can affect the other users. Thus, it is important to limit the harmonic distortion that a facility might produce not only for the benefit of that facility but also for the benefit of the other consumers on the electrical network at the point of common coupling.

*Bulk consumers of electricity have higher capability to inject current harmonics in the network by virtue of large nonlinear loads. The Forum of Regulators has specified such group of customers as "Designated customers" based on their potential to inject harmonics in the electrical network. They include commercial buildings (Healthcare, Hotels, Airports, malls etc.), IT/ITES and Banking, Finance & Service Industries (BFSI) grid connected distributed generating resource and Electric Vehicle Charging infrastructure etc.*

The end users and utilities share responsibility for limiting harmonic current injections and voltage distortion at the point of common coupling. Since there are two parties involved in limiting harmonic distortions, the evaluation of harmonic distortion is divided into two parts: measurements of the currents being injected by the load and calculations of the frequency response of the system impedance. Measurements should be taken continuously over a sufficient period of time so that time variations and statistical characteristics of the harmonic distortion can be accurately represented. Sporadic measurements should be avoided since they do not represent harmonic characteristics accurately given that harmonics are a

continuous phenomenon. Also, short duration temporary Power Quality Monitoring System cannot detect events such as voltage sags, interruptions and transients, which are among the main Power Quality issues.

Regulation 8 of DERC (Supply Code and Performance Standards) Regulations, 2017, also talks of penal charges on non-compliance which are to be notified by the Hon'ble Commission. This Regulation is reproduced below for ready reference:

*"(5) Failure to comply with the permissible limits of Harmonics after inspection as in sub-regulation (3) above may attract penal charges, as may be notified by the Commission from time to time:"*

However, Hon'ble Commission has not notified any penal charges till date.

On the basis of above submission and current regulations, we request the Hon'ble Commission to:

- i. Fix the penal charges at 20%-30% on Energy Charges of the respective consumer category Tariff in respect of those connected or seeking connectivity at 11 kV and above when they fail to provide adequate harmonic filtering equipment to avoid dumping of harmonics into DISCOM's network beyond the permissible limits as specified by CEA Regulations;
- ii. Direct all the HT/EHT consumers to install Power Quality meters in accordance to Central Electricity Authority (Technical Standards for Connectivity of the Distributed Generation Resources) Amendment Regulations, 2019 and also specify the periodicity for sharing the recorded data of PQ meters with the DISCOMs as stipulated in the Amended Regulations of CEA.

## **7. Value Added Services on Paid Basis**

The Petitioner would like to inform the Hon'ble Commission that based on our interaction with various institutional consumers and other consumers having multiple connections, Tata Power-DDL has been receiving from time to time the following requests:

- a) Sharing of load survey data,
- b) Sharing of yearly account statement,
- c) Tool for consumption analysis and helping in demand side management etc.

This is also pertinent to mention that many services of similar nature, offered by banks / financial institutes, like issuance of detailed account statement, duplicate statement etc. are on paid basis. Similarly, railways issue duplicate tickets on chargeable basis.

Considering the increasing consumer requirement for data stored in meter in form of load survey data, a consumer ledger providing detailed billing and payment history over a period time, it is requested to the Hon'ble Commission to allow the DISCOMs to initiate such value added services on paid basis.

## **8. Levy of Surcharge on all residential connections under temporary supply**

In recent tariff orders issued by the Hon'ble Commission, surcharge on residential connection under temporary supply category has been removed in line with residential co-operative group housing connections. While the applicability of the same for residential co-operative group housing connections is understandable, however including "other" residential connections in this category may be avoided due to following reasons:

- a) Apparently now, there is no motivation for residential consumers to switch from temporary to permanent connection as he is availing temporary connection at the same tariff.
- b) Also it will create a lot of safety concerns, since, there is no standardization of cables used by consumers. Also, there is chance of theft by tapping the service cable used by consumer.



- c) Further, there is a scope of misuse of existing permanent connection as consumer will not ask for temporary connection for construction of additional floor/units by consumer as there is no fear of any penalty etc. on account of misuse. *(being on same tariff)*
- d) Temporary connection cannot be denied as per supply code, and there is possibility that consumer will use the same and will not go for permanent connection which is provided subject to feasibility.
- e) Already domestic consumer is subsidized and excluding surcharge from long term temporary connection is like providing them double benefit.
- f) Also, Tata Power-DDL procures long term power based on the demand of the existing consumers and not for the temporary connections (based on load demanded), for which Tata Power-DDL has to make temporary arrangement in terms of procuring additional power on short term basis, which is at much higher rates as compared to long term power being procured on a regular basis.

Considering above points it is requested to allow levy of surcharge on all residential connections under temporary supply category.

#### **9. Revised methodology for LPSC**

It has been observed that few consumers are taking undue benefit of change in the methodology for calculation of LPSC on daily basis as well as regulation of 15 days' notice period before disconnection. Some frequently defaulting consumers has made the habit of paying the bill after due date but well before completing the 15 days of notice period as a result of which Tata Power-DDL is neither able to disconnect consumer supply nor able to charge full month LPSC. This is seriously hampering our efforts for reducing AT&C losses and is affecting honest paying Consumers. Further it is unnecessary increasing DISCOMs operational expenditure for sending DN and Follow Up for payment. Therefore, the Petitioner requests to the Hon'ble Commission to modify guidelines as follows at least for High End Consumer with Load > 10 KW as amount involved is very high:

- a) The Consumers who defaults the payment twice or more in last six month should not be given the additional notice period of 15 Days in case consumer default bills and the bill itself should be treated as disconnection Notice.

- b) The Consumers who defaults the payment twice or more in last six month, Full Month LPSC should be levied on consumer in case of default.
- c) DISCOM should be given option of converting connection of Consumers from Postpaid to Prepaid, if Consumer Defaults more than 2 times in a year.

The Petitioner requests to the Hon'ble Commission to implement above guidelines at least for High End Consumer, so that honest paying and small consumer are not affected due to malpractice of frequent defaulters.

#### **10. RPO compliance**

Open access consumers taking power from Renewable energy sources are exempted from payment of additional surcharge, wheeling charges and transmission charges. Accordingly these charges are paid by other Non-Open access consumers. As a compensation, the Hon'ble Commission may allow Renewable power beyond RPO of Open access consumers to be considered as part of DISCOM RPO compliance. This will help in reduction of purchase of RECs which in no way is adding to physical power but is only an expense on the Non open access consumers in the form of cost of Renewable Energy Certificates.

Extension in timelines for Renewable Compliance: MNRE vide its order of 13<sup>th</sup> August' 2020 in the matter of "Time Extension in scheduled commissioning date of Renewable Energy Projects considering disruption due to lockdown due to Covid-19" has granted 5 months extension in commissioning of the Projects. Many of the projects from which Tata Power-DDL was to receive power are also delayed on account of the same. Accordingly we request for extension for meeting FY 2020-21 RPO also by 5 months beyond the notified Q1 of FY 2021-22 (3 months after end of the relevant year).

#### **11. Short term transmission charges**

With the abolition of Short term transmission charges of CTU being a part of CERC Sharing of Inter-State Transmission Charges and Losses 2020, the Hon'ble Commission should put some mandatory interstate short term transmission charges to be paid by Open access consumers/



deemed licensees like Railways which otherwise will not pay any transmission charges as they do not have any Long Term Transmission (LTA). Accordingly their burden of transmission charges will have to be shared by Non Open access consumers for which LTA has been secured by a utility.

DISCOMs are already paying for LTA to PGCIL and DTL; the DTL STOA charges should also be abolished which are first collected and then reimbursed by DTL.

## **12. Separate flat rate for high consumption in Domestic Category**

Consumption is getting higher and higher in Delhi with changing times and lifestyle changes. Domestic category have lower tariffs for lower consumption slabs and as the consumption increases, tariff also increase. But the high consuming ones also get the benefit of lower tariff according to the slabs. A domestic consumer in Delhi on an average should have a consumption not more than 800 units a month.

In order to deter the high consumption consumers and to limit their consumption and keep it at some lower level, the benefit of lower tariff slabs of domestic category should be disallowed to those consuming more than 800 units a month. For consumers using more than 800 units, one flat rate should be specified without any slabs. This will help reduce wasteful consumption, contribute in combating climate change, make consumers more energy saving conscious and will help only the economically weaker sections to take the benefit of cheaper power on lesser consumption.

For the reasons cited above, the Hon'ble Commission may kindly notify a separate flat rate for high consumption in Domestic Category.

## **13. Charging of leading power factor while billing (kVAh billing) to High End Consumers**

The present billing scenario is based on lagging reactive power only. Since the reactive lagging as well as leading power both occupy the capacity of electricity network and reduce the useful

capacity of system for generation and distribution, it is necessary and imperative to include the lead Reactive Power under billing process. At present, utilities overlook leading Power Factor (PF) values while billing the consumption. This tempts consumers to use capacitors indiscriminately for availing PF incentives but it does more harm than good to the installations of both the utilities and consumers.

Consumer equipment and installation are not provided with appropriate and adequate capacitor installations but mostly with use of fixed capacitors, bulk compensation on HT in fixed mode, use of substandard controllers having erratic and inconsistent performance, thereby leading to additional Reactive (lead) Power Charges, which is causing undesirable unwarranted burden on Tata Power-DDL. It is important to note that, more particularly, during winter season, there is hardly any reactive injection, and due to high capacitive injection by high end consumers, the voltage becomes very high and sometimes so much so that it becomes difficult to control the same.

The reactive compensation is effective when it is nearer to the load and the extra reactive compensation by industrial consumers cannot be used / compensated against extra reactive energy drawl by agricultural section. Current is higher at lagging or leading power factor as compared to unity power factor and hence losses are also higher. Under leading power factor, excessive over voltages may occur thus endangering the system stability. As a result, in both situations, system stability of Tata Power-DDL is hampered. Also, for serving the same load, a transformer of higher capacity is required due to increase in current due to lead power factor. In view of the above facts, it can be seen that injection of leading power factor in excess is not always beneficial for the system. It is thus imperative that every section of consumer has to shoulder its responsibility to maintain the system power factor within permissible limits only to maintain Grid stability and full utilisation of Installed capacity of Distribution network. Absence of any punitive measures for overcompensation prompted the consumers to use capacitors indiscriminately, much in excess of their requirements. CEA mandates that power factor of the bulk consumer shall be within  $\pm 0.95$  and hence the lead power factor also has to be within prescribed limits and to maintain it, adequate reactive compensation is to be provided and its burden is also on the bulk consumer apart from the



distribution licensee. No state treats the leading power factor as unity and are not allowing incentive for leading factor.

The most effective remedy to remove such anomaly is to introduce kVAh billing in lag as well lead mode i.e. kVARh consumption in the leading power factor mode has to be taken in account as consumption. Introduction of kVAh metering and tariffs in lead as well lag mode will also encourage the consumers to reduce their electricity bill by ensuring that they do not draw reactive power and switch over to using efficient devices with proper power factor correctors or will install only appropriate capacitors at their premises.

Therefore, to ensure better quality and reliable supply of power for the consumers, it is proposed to charge even the leading power factor cases on kVAh basis so that the injection by high end consumers (More than 30 KVA) is as per their actual requirement and proper voltage is maintained for all the consumers. It will not only be helpful and beneficial for Tata Power-DDL but also for the concerned consumers.

The Petitioner requests to the Hon'ble Commission to incorporate appropriate and necessary modification/changes/additions in the ensuing Tariff Order.

#### **14. Rationalization of Tariff by matching recovery of fixed cost of DISCOMs from fixed part of Retail supply Tariff**

We have analysed the cross subsidy of different categories of consumers as allowed by the Hon'ble Commission in True up orders of Tata Power-DDL from FY 13 to have a more realistic understanding. Progressive reduction of cross subsidies of domestic consumer has been reversed in last two years. In fact instead on reducing trend, the cross subsidy of domestic customers has increased from 30% (FY13) to 43% (FY20) in last seven years.

The absence of the cost reflective tariff in the past years has resulted in creation of the Regulatory Asset and Delhi DISCOMs have already been facing problem of non-liquidation of this accumulated Revenue Gap in time bound manner creating a liquidity crunch situation. Further, the concern on creation of Regulatory Assets in future and the need for timely liquidation of the Regulatory Assets has also been emphasized in the Tariff Policy, 2016.

Further, the Hon'ble Commission released an approach paper on Tariff Rationalization in Feb'18, wherein it agreed that in the present scenario, there is a mismatch between the actual Fixed and Variable Cost liability incurred by DISCOMs to the proportion of cost recoverable through Fixed Charge and Energy Charge. As a way forward, the Hon'ble Commission had proposed that the bifurcation between fixed charges and Energy charges should be adjusted gradually, say over a period of three to five years, so as to make the retail tariff reflective of the actual Fixed Cost, so as to minimize the Cross Subsidy between Fixed & Energy Charges. At present, recovery from fixed charges is only 17.30% against the 56.40 % fixed cost of the ARR.

High levels of cross subsidies result in wastage of economic resources. In the subsidized sectors it encourages electricity consumption to a point where the value attached to incremental consumption is lower than the cost of supply. On the other hand, higher tariffs (than the cost of supply) charged to commercial/ industrial consumers pushes up their cost of product/services, which leaves them uncompetitive in today's era of globalisation.

In light of the facts highlighted above and in the interest of consumer and financial viability of the Delhi DISCOMs, the Hon'ble Commission is requested to kindly consider our submissions and ensure that the ensuing tariff should be cost reflective for each category of consumer as well as recover fixed cost of DISCOMs from fixed part of Tariff.

#### **15. Concessions and benefits only to the honest consumers**

The Hon'ble Commission has been making efforts to provide lower tariff to consumers and has also made provisions for some benefits to some categories of consumers. It also needs to ensure that dishonest consumers are not allowed to take benefit of these concessions and only the honest avail them. Those who are defaulting their bill payments or avoiding to pay it on time or pay only when the connection is to be disconnected should not be given these benefits. Defaulters be dissuaded from taking the benefit. Also some consumers engage in theft of electricity, the burden of which is passed on to other consumers.

Therefore all such consumer should not get the following benefits if they engage in Payment Default or Theft of Electricity:

- a) Slab Wise Tariff for Domestic Consumers – Such Consumer should be charged on Flat Tariff corresponding to Highest Slab.
- b) No TOD or Other Rebate should be provided
- c) No Subsidy Benefit if Consumer is Domestic
- d) No Security Interest should be provided
- e) LPSC to be charged on monthly basis

This will help in reducing the ARR of DISCOMs and also the burden of honest paying consumers.

**16. Mandatory Online Payment for consumers above 10 KW or Bill more than Rs 20000/- and on new connection charges for consumers above 10KW.**

In today's times everybody is using internet and digital payments. Hence, consumers who take connection with sanctioned load of 10 KW and above can be assumed comparatively well off and to be better equipped for handling such online transactions. These consumer can be asked to pay bill by digital modes only like e-wallets, Net Banking, NEFT, RTGS, debit card etc.

Following are the Benefits of E-payment for the consumers using it:

- a) Hassle-free
- b) Safe & Secure
- c) Environment Friendly
- d) Saves Time
- e) Cashback

This will help in improving collection efficiency of DISCOMs which in turn help consumer with reduced tariff burden.



The Hon'ble Commission is requested to make this online payment mandatory for connections with sanctioned load above 10KW or Bill amount more than Rs. 20,000/- and on new connection charges for consumers above 10 KW.

**17. Mandatory E-bill for load above 5 kW**

DISCOMs send paper electricity bills to lakhs of consumers every month which is not only wastage of paper but also for resources; this means thousands of trees are cut every year just to send electricity bills to consumers.

In this era of internet, this wastage can be saved by usage of email and what's app. A soft copy of the bill can be sent to the consumer on what's app or on their email. These E Bills will also help in providing additional features to consumers.

Features that can be configured in the E Bill are:

- a) Billing Details
- b) Service Request
- c) Important Information Request like - Know Your Tariff and Total Energy Charges
- d) Know Your Meter – video explaining the meter
- e) Consumer Profile - Display Email & Contact Number of Consumer
- f) Billing Analysis – Last 6 months details of Billed Amount
- g) Payment History and Consumption Pattern
- h) Payment Centers & Schemes/ Offers Section

This can be made mandatory for those connections having sanctioned load of above 5 KW. These consumers, one can hope, to definitively have internet connectivity. This initiative will have the following benefits:

- a) Environment Friendly
- b) Easy Access
- c) Saves Time
- d) Less Documentation

Thus, the Hon'ble Commission is requested to make e-bill mandatory for consumers with sanctioned load above 5 KW.

**18. Non Availability of space in regularized and unauthorized colonies/Areas -Delhi Govt. to provide Land to Tata Power-DDL**

There exists new connections which are released but not executed due to non-availability of space for transformer installation in unauthorised colonies/areas. Due to space constraints, transformer cannot be installed and hence connection cannot be energized. Delhi government should provide land for such cases within a specified timeframe so that the new connection can be released as soon as possible.

Even in Regularized colonies, due to increase in load, many transformers are overloaded but network expansion or enhancing the transformer capacity is a challenge due to lack of space. This leads to quality and reliability issues. Delhi Govt. should make land available in all such cases to DISCOMs on lease and make such arrangements on priority basis so that consumers do not have to suffer. Govt. should also define a timeline for resolution of such issues and ask its concerned departments to adhere to such timelines.

We receive new connection requests from individual applicants in un-electrified areas where development/plotting has been done by a developer. These developers are playing smartly and misusing provisions of #Regulations 21(1) of DERC (Supply Code and Performance Standards) Regulation 2017 to avoid paying the Service-Line-cum Development (SLD) which includes electrification costs and space for installation of Distribution Transformer, switch gear etc. and instead instigating individual applicants to apply for the connection under # Regulation 21(2). Electrification Cost which was to be borne by developer will now be passed on to other Honest Consumers which have no relation to such electrification. This will increase cost to serve and put burden on tariff. With no proper layout/ demarcation of roads and common space in these areas, the installation of transformer, switch gears, electrical equipment's and availability of ROW always pose threat and challenges for laying HT/LT infrastructure and public safety. Also, there are instances when there is one request for a new connection in the midst of agricultural land and there are no proper paths or roads in place

which makes it very difficult for us to provide a new connection which is very far off from the existing transformer location/ LT network. The new connections of these applicants are delayed due to time taking process of land being made available by GoNCTD for installation distribution transformers to meet out the load demand.

In the interest of the consumers, the Hon'ble Commission is requested to take up the matter with GoNCTD.

**19. Aadhar and Pan Card be made mandatory for Application of New Connection and Existing Customers**

Whenever a consumer applies for new connection, DISCOM checks the dues on premises applied for. At times, dues of premises that are of similar address or of other portion are shown as pending/unpaid. This requires personal visit to DISCOM office with all ownership documents with back chain to clarify doubts and is time consuming.

Also, dues at premises are left as recovery is not possible always without establishing the liability on the defaulter who has left the premises. Such recovery suits also take time and sometimes do not give the desired result of dues recovery.

Further to take Aadhar and PAN details of all applicants for existing connection will help in smooth compliance on Tax Collection at source law.

For overcoming such issues, the Hon'ble Commission needs to direct DISCOMs to take Aadhar and PAN details of all applicants when a new connection is applied for as the owner name and premises can be related to these details and unnecessary hardship to the applicant is avoided.

It will have the following benefits:

- a) Recovery of dues
- b) Litigation cases - Easily track the consumers
- c) CIBIL linkages

In the interest of the consumers, the Hon'ble Commission is requested to provide these directions.

with you



**20. Progressive Tariff rationalization in Domestic Consumer Segment as per Electricity Act & National Tariff Policy:**

One of the salient objectives of the electricity reforms beginning with the Electricity Act, 2003 (EA 2003) was reduction in the level of cross subsidies in tariff. The EA 2003, the National Electricity Policy, 2005 and the Tariff Policy, 2016 specify the framework to reduce cross subsidies in retail tariffs in India.

The EA 2003 prescribes that cross subsidies in electricity tariffs should be reduced. It was envisioned that post reforms tariffs would progressively move towards cost of supplying electricity to consumers. Wherever subsidization is required (in case of Lifeline consumers, agriculture etc.), the EA 2003 favored a more transparent method of direct subsidies over cross subsidies.

But even after 17 years of power sector reforms, the Delhi Electricity Tariff is yet to achieve significant progress in reducing cross subsidies prevailing in the system. Instead of reducing the cross subsidies, the cross subsidies of domestic consumers has increased in recent years.

The cross subsidy of Domestic Consumer as allowed by the Hon'ble Commission is given below for reference:

Connected load (kW)	No. of units per month at 20% load factor	ABR (INR/ kWh)	ACoS (INR/ kWh)	Cross-Subsidy (INR/ kWh)
5	720	6.01	8.86	2.85
10	1,440	7.71	8.86	1.15
<b>15</b>	<b>2,160</b>	<b>8.41</b>	<b>8.86</b>	<b>0.45</b>
<b>16</b>	<b>2,304</b>	<b>9.29</b>	<b>8.86</b>	<b>-0.43</b>

As it can be seen from above table, effectively entire domestic category is getting cross-subsidized tariff. Even the Cost of supply is more than Billing Rate when monthly consumption is about ~2,200 units/ month which should not be case.

The above analysis also show the lack of cost reflective tariff due to huge gap in Average cost of supply and Average Billing Rate. The absence of the cost reflective tariff in the past years has resulted in creation of the Regulatory Asset and Delhi DISCOMs have already been facing problem of non-liquidation of this accumulated Revenue Gap in time bound manner creating a liquidity crunch situation. Further, the concern on creation of Regulatory Assets in future and the need for timely liquidation of the Regulatory Assets has also been emphasized in both the Tariff Policy, 2016 and amendments to the Tariff Policy.

Thus there is lot of Scope of rationalizing the tariff for higher consuming households with consumption >400 units per month. As it is evident from the below table, only 15% of domestic consumer will be impacted by proposed Progressive Tariff rationalization.

Category	Domestic Consumer Base
0-200 Units	55%
201-400 Units	28%
401-800 Units	13%
801-1200 Units	3%
>1200 Units	1%

Further on comparison of Different Slabs of Domestic Tariff of Delhi with Mumbai, it can be observed that highest in Mumbai, the highest slab starts from 501 Units while in Delhi the Highest Slab Starts from 1200 Units. The Tariff of Highest Slab in Mumbai is INR 8.9 per units while in Delhi it is INR 8 per unit. This clearly indicates that the domestic consumer in Delhi are highly cross subsidized even at higher consumption level of > 500 Units and highest slab of domestic tariff need to be brought down from current 1201 unit to 601 unit to make tariff equal to cost of supply.

City	No. of slabs	Slabs (based on monthly kWh consumption)	Domestic (highest category slab)	Rate (INR/unit)
Delhi	5	<ul style="list-style-type: none"> <li>0 to 200</li> <li>201 to 400</li> <li>401 to 800</li> <li>801 to 1,200</li> <li>&gt; 1,200</li> </ul>	>1200	8.0
Mumbai	4	<ul style="list-style-type: none"> <li>0 to 100</li> <li>101 to 300</li> <li>301 to 500</li> <li>&gt;500</li> </ul>	>500	8.9

Therefore in view of above submission, it is requested to the Hon'ble Commission:

1. Rationalize the highest slab for domestic consumers from 1200 units to 600 units. Current slabs are at 0-200,201-400,401-800,801-1200 & > 1200 units. This will change to 0-200,201-400,400-600 & > 600 units.
2. Rationalization in tariff in line with paying capacity of consumers. Tariff for Unit Slabs of 200-400, 400-600 and >600 units may be rationalized as these are a relatively smaller base of consumers and can afford to pay as per cost of supply.

## **21. Linkage of Electricity Tariff with WPI/CPI :**

Cost of Supply of Electricity mainly depend on Power Purchase cost, Manpower Cost, Cost of equipment for O&M/Capital Expenditure and Rate of Debt. Any variation in these Cost directly affect the cost of supply of electricity. While Power Purchase cost vary with variation in Fuel Cost or Freight Charges, Manpower Cost vary with Minimum Wages / Dearness allowance etc. and Cost of Equipment vary with cost of raw material. Most of these variations are tracked by Consumer Price Index (CPI) and Whole Sale Price Index (WPI) and any direct change in cost of above three parameters also lead to change in the WPI/CPI Index.

Since most of these cost are or un controllable parameters therefore its suggested to link the Electricity Tariff revision with WPI/CPI. On Annual Basis, The Electricity Tariff can be increased based upon the increase in WPI/CPI Index of LFY. This will not only help in Timely revision of Tariff leading to lower carrying cost burden on consumer but

will also make the process scientific and a-political. Similar concept was already done in case of auto fuel by Government of India. The retail prices of petrol and diesel in India are decontrol are linked to the global crude prices.



**TATA POWER DELHI DISTRIBUTION LIMITED**

**Profit & Loss Account**

Form No: S1

All figures in Rs Crores

Sl. No.	Particulars	FY 2019-20		Variance
		Audited	Actual	
<b>A</b>	<b>Revenue</b>			
1	Revenue from sale of power			
2	Non-tariff income	7,749.20		
3	Other Revenue/ subsidies - Sourcewise	244.07		
	<b>Total Revenue or Income</b>	<b>7,993.27</b>		
<b>B</b>	<b>Expenditure</b>			
1	Purchase of Power from Long term Sources			
2	Purchase of Power from Other than Long term Sources			
3	Transmission Charges			
	(a) Inter State			
	(b) Intra State			
4	Load Despatch Charges			
5	Operations and Maintenance Expenditure			
	(a) Repairs and Maintenance			
	(b) Employee costs (Excluding loans and advances to Staff)	199.88		
	(c) Administration and General expenses	561.42		
6	Net prior period credit/(charges)	115.26		
7	Other Debits, Write-offs			
8	Extraordinary items-- Regulatory Income/Expense	-462.71		
9	Less: Expenses Capitalized (A&G/Employee Expenses)	-56.52		
<b>C</b>	<b>Profit before depreciation, interest and taxes</b>	<b>1,336.31</b>		
<b>D</b>	<b>Depreciation</b>	<b>333.16</b>		
<b>E</b>	<b>Provisions</b>	<b>12.18</b>		
<b>F</b>	<b>PBIT</b>	<b>990.97</b>		
1	Interest & Finance Charges	354.85		
2	Less: Interest Capitalized	-9.95		
<b>G</b>	<b>Total Interest and Finance Charges</b>	<b>344.90</b>		
<b>H</b>	<b>TOTAL EXPENDITURE</b>	<b>7,347.20</b>		
<b>I</b>	<b>Profit/Loss before Tax</b>	<b>646.07</b>		
<b>J</b>	<b>Income Tax</b>	<b>108.73</b>		
<b>K</b>	<b>Deferred Tax</b>	<b>123.19</b>		
	Other Comprehensive Income & Exceptional Item - Impairment of property plant equipment	-3.87		
<b>M</b>	<b>Profit/Loss after Tax</b>	<b>410.27</b>		

Figures are as per Audited Financial Statement for FY 2019-20

**TATA POWER DELHI DISTRIBUTION LIMITED**

**Cash Flow Statement (Direct Method)**

**Form No.: S2**

All figures in Rs Crores

SL. No	Particulars	Amount
<b>A</b>	<b>Opening Cash and cash equivalents</b>	<b>24.25</b>
<b>B</b>	<b>Cash Inflows</b>	
	Collection	
	<i>Towards sale of Energy *</i>	7,318.99
	<i>Towards subsidy disbursed</i>	669.68
	Collection from Open Access	11.07
	Collection from Pension Trust Surcharge	254.72
	Bulk supply of short term power sale (net of rebate)	88.89
	Proceeds from bank deposits	
	Disbursement of loan taken	
	<i>Capex</i>	600.00
	<i>Non Capex</i>	5,738.34
	Non Tariff/ Other Income	151.21
	Proceeds from Service Line Deposit	28.94
	Proceeds from Capital Grants/CCCW/CDW	148.92
	Net proceeds from CSD	48.82
	Advance Govt Subsidy	79.14
	<b>Total Cash Inflow- "B"</b>	<b>15,138.73</b>
<b>C</b>	<b>Cash Outflow</b>	
	Capital expenditure (Vendor Payments & net of sale of fixed assets)	477.19
	Power Purchase payment (net of rebate)	5,489.48
	Short Term Power Purchase payment	954.49
	Amount Paid to Pension Trust Surcharge	260.10
	Operation and Maintenance Expenses***	
	<i>Employee Expenses</i>	510.86
	<i>A &amp; G Expenses</i>	111.26
	<i>R &amp; M Expenses</i>	180.79
	<i>Others (IND AS 116)</i>	13.24
	Advances	94.70
	Statutory Dues	
	<i>Taxes paid (including tax deducted at source)</i>	112.41
	<i>Electricity Tax ( net of Commission on E. Tax collection/other adjustment)</i>	288.25
	Dividend paid Both Equity & Preference Shares (including dividend tax)	119.78
	Financial Expenses	85.00
	Loan repayment	5,746.19
	Net Bank Deposit	65.53
	Financial Expenses	351.27
	Utilisation of Cash Credit during the year	254.34
	Repayment of Lease Liability	9.56
	<b>Total Cash Outflow - "C"</b>	<b>15,124.45</b>
<b>D</b>	<b>Closing Cash/Bank balances ("D = (A+B-C)")</b>	<b>38.53</b>

**Notes:**

\* Collection towards sale of energy is calculated as Total Billed Amount during the year less (Non Energy Billed During the year & subsidy disbursed during the year).

\*\* Other payments (net) is on account of movement in residual assets and liabilities.

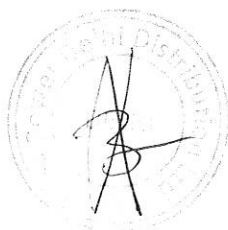
\*\*\*Operation and Maintenance Expense are considered as per Audited Financial Statements of the year.

## TATA POWER DELHI DISTRIBUTION LIMITED

Annual Revenue Requirement for FY 2019-20

Form No: 53

Sl. No	Particulars	Amount	Variance	Remark
1	Power Purchase (MU) at TPDDL Periphery	9,751.72		Reconciliation with Audited Accounts of the Year (Please mention Exact Note/Schedule for the Audited Accounts), if available.
2	Sale of Power (MU)	9,085.73		
3	Distribution Loss %	6.83%		
3.1	Distribution Loss in Mus	665.99		
1	<b>Receipts</b>			
a	Revenue from tariffs			
	i) Fixed Charges	7,584.08		
	ii) Energy Charges			
	iii) PPAC			
	iv) Surcharge for Regulatory Asset (8%)			
	v) Electricity Duty			
	v) Any Other Receipt			
b	Revenue subsidy from Govt.			
	<b>Total</b>	<b>7,584.08</b>		
2	<b>Expenditure</b>			
a	Purchase of Power from Long Term Sources	6,299.25		
b	Purchase of Power from Other than Long Term Sources			
c	Transmission Charges			
	i) Intra State			
	ii) Inter State			
d	Load Despatch Charges			
e	O&M Expenses	885.68		Link with P & L A/c
	i) R&M Expense			
	ii) Employee Expenses			
	iii) A&G Expense			
	iv) Statutory Levies, Change in Taxes, etc.			
f	Depreciation	240.85		
g	Carrying Cost	366.77		
m	Other - Loss on Retirement-/ (charges)	19.09		
	<b>Total</b>	<b>7,811.64</b>		
3	Return as approved/ allowed by Commission	484.23		
4	Non Tariff Income	85.36		
5	<b>Annual Revenue Requirement (2)+(3)-(4)</b>	<b>8,210.51</b>		
6	Surplus(+) / Shortfall(-) : (1)-(5)+(6) before tariff revision	(626.43)		



**Tata Power Delhi Distribution Limited**

**Break up of Power purchase cost for FY 2019-20**

										Form No. F1	
Sl. No.	Particulars	Units Billed (MUs)	Energy Charges (Rs. Cr.)	Fixed Cost (Rs. Cr.)	Interest (Rs. Cr.)	Incentive (Rs. Cr.)	Income Tax (Rs. Cr.)	Trading Margin (Rs. Cr.)	Open Access/Transmission Charges (Rs. Cr.)	Total Cost (Rs. Cr.)	
64	100% Solar	2.04	-5.50	-	-	-	-	-	-	-	-5.50
<b>Transmission</b>											
65	PGCIL POC Bill 1	-	-	-	-	-	-	-	-	461.17	461.17
66	PGCIL POC Bill 3	-	-	-	-	-	-	-	-	148.28	148.28
67	PGCIL NON POC Bill	-	-	-	-	-	-	-	-	18.24	18.24
68	DTL Wheeling Charges	-	-	-	-	-	-	-	-	275.12	275.12
69	DTL NRDC Charges	-	-	-	-	-	-	-	-	1.31	1.31
70	DTL Application Charges	-	-	-	-	-	-	-	-	0.10	0.10
71	DTL Reactive Energy Charges	-	-	-	-	-	-	-	-	7.35	7.35
72	DTL SIDC Charges	-	-	-	-	-	-	-	-	2.55	2.55
73	DTL STOA Credit	-	-	-	-	-	-	-	-	-135.95	-135.95
74	BBMB Charges	-	-	-	-	-	-	-	-	0.43	0.43
75	Chandrapura Thermal Power Station - Unit 7 & 8 Tx Charges	-	-	-	-	-	-	-	-	1.56	1.56
76	CLP Jhajjar Tx Charges	-	-	-	-	-	-	-	-	7.70	7.70
77	Maithon Thermal Power Station - Unit 6 Tx Charges	-	-	-	-	-	-	-	-	0.38	0.38
78	Mejla Thermal Power Station - Unit 6 Tx Charges	-	-	-	-	-	-	-	-	0.20	0.20
79	NHPPL - SIDC	-	-	-	-	-	-	-	-	-	-
80	NHPPL - Transmission	-	-	-	-	-	-	-	-	3.80	3.80
81	NTPC - Transmission Charges	-	-	-	-	-	-	-	-	0.21	0.21
82	SECI - SIDC	-	-	-	-	-	-	-	-	0.03	0.03
83	SECI - Transmission	-	-	-	-	-	-	-	-	1.94	1.94
84	SHREPL - SIDC	-	-	-	-	-	-	-	-	6.21	6.21
85	SHREPL - Transmission	-	-	-	-	-	-	-	-	0.01	0.01
86	TEHP (Koteshwar) - NRDC Charges	-	-	-	-	-	-	-	-	0.01	0.01
87	TEHP (Terni) - NRDC Charges	-	-	-	-	-	-	-	-	2.03	2.03
88	SEL - Transmission	-	-	-	-	-	-	-	-	0.87	0.87
89	THPPL - Transmission	-	-	-	-	-	-	-	-	0.00	0.00
90	NARPS Unit 1 & 2 NRDC	-	-	-	-	-	-	-	-	33.12	33.12
91	NARPS Unit 3 & 6 NRDC	-	-	-	-	-	-	-	-	24.97	24.97
92	Banking Purchase STOA	-	-	-	-	-	-	-	-	0.36	0.36
93	Bilateral purchase STOA	-	-	-	-	-	-	-	-	7.00	7.00
94	Banking Sale STOA	-	-	-	-	-	-	-	-	46.46	46.46
95	Banking Sale STOA	-	-	-	-	-	-	-	-	4.73	4.73
96	EX Sale STOA	-	-	-	-	-	-	-	-	0.01	0.01
97	EX Sale STOA	-	-	-	-	-	-	-	-	0.00	0.00
98	PXIL Purchase	-	-	-	-	-	-	-	-	0.00	0.00
99	NAPS Unit 1 & 2 NRDC	-	-	-	-	-	-	-	-	0.00	0.00
<b>Long Term Purchase</b>		8,179.01	2,425.97	2,126.77	109.61	0.27	-4.08	158.38	920.35	5,737.28	
<b>Short Term Purchase/Sale</b>											
1	OT Purchase	89.72	27.99	-	-	-	-	-	-	27.99	
2	EX Purchase	1,071.08	332.80	-	-	-	-	2.59	-0.00	335.39	
3	Banking Purchase	723.06	186.78	-	-	-	-	1.90	-	188.68	
4	Bilateral Purchase	465.84	204.97	-	-	-	-	0.08	-	205.05	
5	DSM Purchase	4.22	2.73	-	-	-	-	-	-	2.73	
<b>Short Term Purchase</b>		2,353.92	757.28	-	-	-	-	4.57	-0.00	761.85	
1	OT Sale	22.57	-10.46	-	-	-	-	-	-	-10.46	
2	EX Sale	134.82	-50.41	-	-	-	-	0.32	-	-50.09	
3	Banking Sale	198.37	-54.50	-	-	-	-	-	-	-54.50	
4	Bilateral Sale	-10.91	-4.99	-	-	-	-	-	-	-4.99	
5	DSM Sale	137.38	-21.38	-	-	-	-	-	-	-21.38	
<b>Short Term Sale</b>		-504.06	-141.75	-	-	-	-	0.32	-	-141.43	
<b>Summary</b>											
<b>Total All Bills</b>											
SI No.	Particulars	Units Billed (MUs)	Energy Charges (Rs. Cr.)	Fixed Cost (Rs. Cr.)	Interest (Rs. Cr.)	Incentive (Rs. Cr.)	Income Tax (Rs. Cr.)	Others Charges (net of adj) (Rs. Cr.)	Open Access/Transmission Charges (Rs. Cr.)	Total Cost (Rs. Cr.)	
1	Long term	8179.01	2426.00	2126.80	109.61	0.27	-4.10	158.40	0.10	4817.04	
2	Transmission	0.00	0.00	0.00	0.00	0.00	0.00	0.00	920.24	920.24	
3	Short Term Purchase	2353.92	757.30	0.00	0.00	0.00	0.00	4.60	0.00	761.85	
4	Short Term Sale	-504.10	-141.75	0.00	0.00	0.00	0.00	0.00	0.00	-141.43	
<b>Net Power Purchase Cost</b>		10028.87	3041.50	2126.77	109.61	0.27	-4.08	163.28	920.35	6357.70	
<b>Total Consumption as per Audited Accounts</b>		9751.72								6357.70	





Licensee : TATA POWER Delhi Distribution Limited (Formerly North Delhi Power Limited)																				
Details of the Billed Revenue From 01-Apr-2019 To 31-Mar-2020																				
BILLING REPORT																			Summary	
S. No.	Category	Tariff	Average number of days billed during the month billing factor	Total Number of consumers and sanctioned load		Total No. of bills raised during the period & Contracted demand		Total Sales		Fixed Charges Billed <sup>1</sup>	Energy Charges Billed <sup>2</sup>	Other Charges <sup>3</sup>	PPCA Amount Billed	Surcharge of 8%	Pension Trust Surcharge	E-Tax	Subsidy if Any <sup>4</sup>	Net Units Sold	Total Revenue including Subsidy but excluding E-Tax, 8% surcharge and Pension Trust Surcharge	Collection <sup>5</sup>
				MW	No.	MW	No.	MU	BYVAH	Rs. Cr.	Rs. Cr.	Rs. Cr.	Rs. Cr.	Rs. Cr.	Rs. Cr.	Rs. Cr.	Rs. Cr.	MU	Rs. Cr.	Rs. Cr.
		Fixed Charge	Energy Charge																	

Auditor Certificate provided as Annexure A-1

Auditor Certificate provided as Annexure A-1



TATA POWER DELHI DISTRIBUTION LIMITED												
Supplement to Form F2 (a)										Form No: F2 (a)		
Break up of Consumption details under respective slabs (in Kwh) as applicable from time to time in tariff order												
Domestic		0-200 Units	201-400 Units		401-800 Units			801-1200 Units			Above 1200 Units	
		0-200	0-200	201-400	0-200	201-400	401-800	0-200	201-400	401-800	800-1200	Above 1200
		MUS	MUS		MUS			MUS				MUS
1.1 (a)	Upto 2 KW Load	817.85	1,028.04		627.19						84.47	17.81
1.1 (b)	2 KW to 5 KW Load	64.38	230.29		365.77						175.21	65.17
1.1 (c)	5 to 15 KW Load	22.13	76.73		198.13						166.57	227.77
1.1 (c)	15 to 25 KW Load	0.14	0.52		3.13						4.72	35.56
1.1 (c)	Above 25KW	0.01	0.03		0.24						0.48	85.55



**TATA POWER DELHI DISTRIBUTION LIMITED**

**Revenue & Capital Subsidies for FY 2019-20**

**Form No.: F3**

**All figures in Rs Crores**

Sl. No	Particulars	Opening Balance	Received	Disbursed/Utilised	Closing Balance
<b>A</b>	<b>Revenue Subsidies And Grants</b>				
1	Billed Subsidy		-669.68	-669.68	0.00
	<b>Sub-Total</b>		<b>-669.68</b>	<b>-669.68</b>	<b>0.00</b>
<b>B</b>	<b>Capital Subsidies And Grants</b>				
	<b>Sub-Total</b>	-	-	-	-



**TATA POWER DELHI DISTRIBUTION LIMITED**

**Income from investments and Non-Tariff Income**

**Form No: F4**

Sl. No	Particulars	All figure in Rs Crore
		PY (2019-20)
		Actual
<b>A</b>	<b>Non Tariff Income</b>	
	Late Payment Surcharge Collected	19.38
	Less- LPSC financing Cost	-8.73
	Service Line Charges	28.94
	Maintenance Charges	12.68
	Less- Incentive On Street Light Maintenance	-1.11
	Commission on DVB arrears	0.04
	Commission on Energy Tax Collection	9.01
	Miscellaneous Operating Income	4.07
	Other Non-operating Income	1.79
	Interest on Consumer Security Deposit	-7.15
	Open Access Charges	12.28
	<b>Sub-Total</b>	<b>71.20</b>
<b>B</b>	<b>Other Business Income (Net)</b>	
	<b>Sub-Total</b>	<b>14.16</b>
	<b>Total</b>	<b>85.36</b>

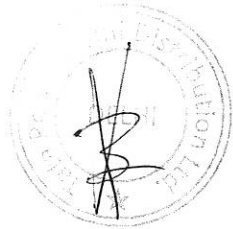


**TATA POWER DELHI DISTRIBUTION LIMITED****Repair & Maintenance Expenditure**

Form No: F5

All figure in Rs Crore

Sl.No.	Particulars	FY (2019-20) Actual (As per Audited Financial Statement)
1	Sub-Station	199.88
	I) Owned	
	ii) Outsourced	
2	Transformer other than installed in Sub Station	
3	Building	
4	Civil Works	
5	Others Works	
6	Lines, Cables Net Works etc.	
7	Vehicles	
8	Furniture and Fixtures	
9	Office Equipments	
10	Spare Inventory for maintaining Transformer redundancy	
11	Sub station maintenance by private agencies	
	<b>Total</b>	<b>199.88</b>



**TATA POWER DELHI DISTRIBUTION LIMITED**

**Employee Cost and Provisions**

Form No: F6

All figure in Rs Crore

Sl. No	Particulars	PY (2019-20)
		Actual (As per Audited Financial Statement)
	<b>Employee's Cost</b>	
1	Salaries	
2	Dearness Allowance	
3	Other Allowances & Relief	
a	Allowance details	
4	Medical Expenses Reimbursement	
5	Leave Travel Asslstance	
6	Fee & Honorarium	
7	Incentives/Awards Including That In Partnership Project (Specify Items)	
8	Earned Leave Encashment	
9	Tution Fee Re-Imbursement	
10	Leave Salary Contribution	
11	Payment Under Workman'S Compensation And Gratuity	
12	Subsidised Electricity To Employees	
13	Staff Welfare Expenses	
	<b>Apprentice And Other Training Expenses</b>	
	<b>Payment/Contribution To PF Staff Pension And Gratuity</b>	
1	Terminal Benefits	
	a) Provident Fund Contribution	
	b) Provision for PF Fund - Invested	
	Not Invested	
	c) Pension Payments	
	d) Gratuity Payment	
	e) Leave Encashment Payment	
2	Any Other Items	
	<b>Total D</b>	
	Bonus/Exgratia To Employees	
	<b>Grand Total</b>	561.42
	Chargeable To Construcion Works	56.52
	<b>Balance Item 'F' Aproprate For (F)-(G)*</b>	504.90
	<i>Note: Incuding Interim impact of 7th Pay Commission</i>	

**TATA POWER DELHI DISTRIBUTION LIMITED****No. of Employees as on 31.03.2020****Form No: F6(a)**

Sl. No	Particulars	PY (2019-20)
		Number of Employees
1	Total number of Employees in the opening (Excluding employees directly allocated for projects)	3344
1.1	DVB employees (out of above)	1158
1.2	Other than DVB Employees (out of above)	2103




**TATA Power Delhi Distribution Limited**

**Adminstration & General Expenses**

Form No: F7

All figures in Rs Crore

Sl.No.	Particulars	PY (2019-20)	Actual (As per Audited Financial Statement)
<b>A)</b>	<b>Administration Expenses</b>		
1	Rent rates and taxes (Other than all taxes on income and profit)		
2	Insurance of employees, assets, legal liability		
3	Revenue Stamp Expenses Account		
4	Telephone, Postage, Telegram, Internet Charges		
5	Incentive & Award To Employees/Outsiders		
6	Consultancy Charges		
7	Technical Fees		
8	Other Professional Charges		
9	Conveyance And Travel (vehicle hiring, running)		
10	DERC License fee		
11	Plant And Machinery		
12	Security / Service Charges Paid To Outside Agencies		
13	Regulatory Expenses		
14	Ombudsman Expenses		
15	Consumer Forum		
	<b>Sub-Total of Administrative Expenses</b>		115.26
<b>B)</b>	<b>Other Charges</b>		
1	Fee And Subscriptions Books And Periodicals		
2	Printing And Stationery		
3	Advertisement Expenses (Other Than Purchase Related) Exhibition & Demo.		
4	Contributions/Donations To Outside Institute / Association		
5	Electricity Charges To Offices		
6	Water Charges		
7	Public Interraction Program		
8	Any Other expenses		
	<b>Sub-Total of other charges</b>		
<b>C)</b>	<b>Legal Charges</b>		
<b>D)</b>	<b>Auditor'S Fee</b>		
<b>E)</b>	<b>Frieght - Material Related Expenses</b>		
<b>F)</b>	<b>Departmental Charges</b>		
<b>G)</b>	<b>Total Charges net of Provision for Contingency</b>		115.26
	Note : Provision for Contingencies is related to Generation Business hence excluded		
<b>H)</b>	<b>Total Charges Chargeable To Capital Works</b>		
<b>I)</b>	<b>Total Charges Chargeable To Revenue Expenses</b>		



## Fixed Assets and Provision for Depreciation

Form No: F8

All figures in Rs Crores

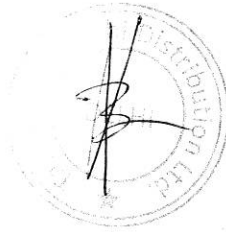
Previous Year (2019-20)												
Sl.No	Particulars	Financial Year of Commissioning	Gross Fixed Assets				Provision For Depreciation on GFA (net of consumer contribution)				Net Fixed Assets	
			Opening Balance	Addition During Year	Decapitalization	Closing Balance	Opening Balance	Addition During	Decapitalization	Closing Balance	Opening Balance	Closing Balance
1	Land & Land rights											
2	Building and Civil Works											
	Others 1											
	Others 2											
	Others 3											
	Sub-Total											
3	Line Cable Networks etc.											
	Towers, poles, fixtures, overhead conductors, devices											
	Transformers		5,414.80	567.64	62.52	5,919.92	1,826.04	240.85	34.14	2,032.75	3,588.76	3,887.17
	Switchgears, Control gear & Protection											
	Batteries											
	Others											
4	Communication equipment											
5	Meters											
6	Vehicles											
7	Furniture & fixtures											
8	Office Equipments											
9	Any other items											
	Total (1 to 9)		5,414.80	567.64	62.52	5,919.92	1,826.04	240.85	34.14	2,032.75	3,588.76	3,887.17



TATA POWER DELHI DISTRIBUTION LIMITED  
Format for Capitalization for FY 2019-20

Form No.: F9

S.No.	Name of Division	Scheme No.	Description of Scheme	Item Name	Item Code /Unique Code No.	Functional Location	Amount Capitalized	Material Cost	Labour & Transportation	Road Restoration Charges	Interest During Construction	Liquidated damages	A&G Expenses	Date of Electrical Inspector clearance	Date of COD	Remarks
<p>.....INFORMATION SHALL BE SUBMITTED IN DUE COURSE OF PRUDENC CHECK.....</p>																

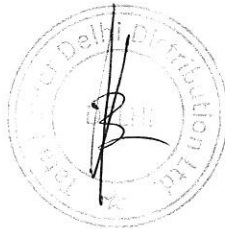


## Interest &amp; Finance Charges

TATA POWER DELHI DISTRIBUTION LIMITED

Form No: F10

Particulars			Interest Rate	PY (2019-20) Actual (As per Audited Financial Statement)
A	I	Interest and Finance Charges on Long Term Loans / Credits from the FIs/banks/organisations approved by the State Government		244.26
		Total of I (Weighted average)		244.26
	II	Interest on Working Capital Loans Or Short Term Loans		40.39
		Total of A : I + II		284.65
B		Other Interest & Finance Charges		
	1	Cost of raising Finance & Bank Charges etc.		1.66
	2	Interest on Security Deposit		59.86
	3	Dividend on non-convertible cumulative redeemable preference shares		
	4	Other Interest		0.00
	5	Interest on lease liability (gross)		0.23
		Total of B		8.45
C		Grand Total Of Interest & Finance Charges: A + B		70.20
D		Less: Interest & Finance Charges Chargeable to Capital Account		354.85
E		Net Total Of Interest & Finance Charges : For Revenue Account: C-D		9.95
				344.90



TATA POWER DELHI DISTRIBUTION LIMITED																
Loan details for financial year 2019-20																
Serial No.	Name of Lender (Institution/ Bank/Company)	Loan No.	Loan details				Moratorium period, if any	Principal						Payment of interest		
			Details of sanction			Opening Balance		Disbursed		Repaid		Closing Balance	Rate of interest	Date of payment of	Amount paid (net of rebate, if any)	
			Date of Sanction	Amount	Period of Loan			Amount	Date	Amount	Date					
Auditor Certificate provided as Annexure A-7																



TATA POWER DELHI DISTRIBUTION LIMITED		
Statement of Sundry Debtors and provision for Bad & Doubtful Debts		Form No: F12
		All figures in Rs Crores
Sl.No.	Particulars	FY 2019-20 Actual (As per Audited Financial Statement)
1	Receivable from customers as at the beginning of the year	27,062.56
	a) Domestic	8,823.84
	b) Non-Domestic	6,361.93
	c) Industrial	3,162.11
	d) Agriculture	154.75
	e) Mushroom Cultivation	
	f) Public Lighting	2,320.93
	g) Delhi Jal Board	96.21
	h) Delhi International Airport Limited	
	i) Railway Traction <sup>5</sup>	0.25
	j) DMRC (Supply at 220 kV and 66 kV)	4,657.18
	k) Advertisements and Hoardings	25.61
	l) E-Rikshaw	52.73
	m) Staff	7.77
	n) Other Debtors	1,399.26
2	Revenue billed for the year	8,33,669.86
	a) Domestic	2,65,387.48
	b) Non-Domestic	2,15,070.83
	c) Industrial	2,96,673.86
	d) Agriculture	919.81
	e) Mushroom Cultivation	
	f) Public Lighting	12,866.08
	g) Delhi Jal Board	21,791.62
	h) Delhi International Airport Limited	
	i) Railway Traction <sup>5</sup>	
	j) DMRC (Supply at 220 kV and 66 kV)	17,490.96
	k) Advertisements and Hoardings	85.83
	l) E-Rikshaw	1,107.34
	m) Staff	565.80
	n) Other Including /nforcement	1,710.23



Sl.No.	Particulars	FY 2019-20
		Actual (As per Audited Financial Statement)
<b>3</b>	<b>Collection for the year</b>	
	Against current dues	8,24,339.06
	Against arrears upto previous year	
	a) Domestic	2,66,997.76
	b) Non-Domestic	2,13,042.10
	c) Industrial	2,89,530.96
	d) Agriculture	983.66
	e) Mushroom Cultivation	
	f) Public Lighting	11,902.74
	g) Delhi Jal Board	21,766.69
	h) Delhi International Airport Limited	
	i) Railway Traction <sup>5</sup>	0.25
	j) DMRC (Supply at 220 kV and 66 kV)	16,682.10
	k) Advertisements and Hoardings	82.87
	l) E-Rikshaw	1,068.02
	m) Staff	571.68
	n) Other Including /nforcement	1,710.23
<b>4</b>	<b>Adjustment for the year</b>	<b>(314.16)</b>
	a) Domestic	(1,385.07)
	b) Non-Domestic	(1,167.70)
	c) Industrial	(296.78)
	d) Agriculture	(223.13)
	e) Mushroom Cultivation	
	f) Public Lighting	69.01
	g) Delhi Jal Board	(84.13)
	h) Delhi International Airport Limited	
	i) Railway Traction <sup>5</sup>	0.00
	j) DMRC (Supply at 220 kV and 66 kV)	40.73
	k) Advertisements and Hoardings	(1.58)
	l) E-Rikshaw	7.36
	m) Staff	1.61
	n) Other Including /nforcement	2,725.53
<b>5</b>	<b>Gross receivable from customers as at the end of the year</b>	<b>36,079.20</b>
	a) Domestic	5,828.49
	b) Non-Domestic	7,222.96
	c) Industrial	10,008.22
	d) Agriculture	(132.23)
	e) Mushroom Cultivation	
	f) Public Lighting	3,353.28
	g) Delhi Jal Board	37.01
	h) Delhi International Airport Limited	
	i) Railway Traction <sup>5</sup>	-
	j) DMRC (Supply at 220 kV and 66 kV)	5,506.77
	k) Advertisements and Hoardings	27.00
	l) E-Rikshaw	99.41
	m) Staff	3.51
	n) Other Including /nforcement	4,124.78

Sl.No.	Particulars	FY 2019-20
		Actual (As per Audited Financial Statement)
6	Receivables against permanently disconnected consumers	
	a) Domestic	
	b) Non-Domestic	
	c) Industrial	
	d) Agriculture	
	e) Mushroom Cultivation	
	f) Public Lighting	
	g) Delhi Jal Board	
	h) Delhi International Airport Limited	
	i) Railway Traction <sup>5</sup>	
	j) DMRC (Supply at 220 kV and 66 kV)	
	k) Advertisements and Hoardings	
	l) Temporary Supply	
7	Receivables(4-5)	
8	% of provision	
9	Provision for bad and doubtful debts	
<p><b>Note 1:</b> Refer Sheet Name Final Master which is used for compilation of Rate Category in the desired format. Wherever Rate category is not assigned the same has been assigned on the basis of Prime category on the basis of account determination ID of that consumer</p>		
<p><b>Note 2:</b> In the Form 2.1 Billed sale is separately shown for Temporary Supply &amp; Misuse. However the collection against the same is shown in respective category. This is the main reason for difference in category Wise calculated closing debtor Vs actual closing Debtor</p>		
<p><b>Note 3:</b> Adjustment column include Bad debt net of recovered (Gross Basis), Increase in Amnesty scheme Debtor (Considered in AT&amp;C collection on disburse Basis) and unbilled Maintenance Charges etc..</p>		
<p><b>Note 4:</b> Other Adjustment in Row Represent Not Paid at all sale Booked on collection basis</p>		
<p><b>Note 5:</b> Financial book Adjustment contain Bad Debt , Not paid at all , SD charged in invoice &amp; Debtor transferred to Advance from debtor etc...</p>		
<p><b>Note 6:</b> Rate Category in Debtor is as per report which has been extracted recently</p>		
<p><b>Note 7:</b> Opening &amp; closing Debtor include Energy (Debtor against Sale) as well Non Energy Debtor (Debtor created other than sale) however the Revenue Billed &amp; collected is Energy Collection as per past practice.</p>		



**TATA POWER DELHI DISTRIBUTION LIMITED**  
**Contributions towards Cost of Capital Assets** Form No: F 13  
 All figures in Rs Cr.

Sl No	Particulars	Previous Year			
		Balance at the beginning of the year	Additions during the Year	Capitalized during the year	Balance at the end of the Year
1	Consumer Contribution Towards Cost Of Capital Assets	868.51		32.43	900.94
	Total	868.51	-	32.43	900.94



## TATA POWER DELHI DISTRIBUTION LIMITED

Statement of Assets Not in Use

Form No: F14

All figures in Rs Crores

Sl. No.	Financial Year*	Historical Cost/Cost of Acquisition	Date of withdrawal operations	Accumulated Depreciation on date of withdrawal	Written down value on date of withdrawal
-----NIL-----					
*Note:- Information to be provided for Previous Year, Current Year & Ensuing Year					



**TATA POWER DELHI DISTRIBUTION LIMITED**

**Current Assets & Liabilities**

Form No: F15

Sl.No.	Particulars	PY (2019-20)
		Actual
<b>A</b>	<b>Current Assets, Loans and Advances</b>	<b>1,090.56</b>
	Inventories	13.17
	<b>Financial Assets</b>	
	Trade Receivable	316.05
	Cash and bank equivalents	38.53
	Bank Balance other than above	101.34
	Other Financial Assets	329.29
	Other Current Assets	207.17
	Investments	85.00
<b>B</b>	<b>Current Liabilities and Provisions (other than Short Term Borrowings)</b>	<b>1,494.60</b>
	<b>Financial Liabilities</b>	
	Trade Payable	1,111.18
	Other financial liabilities excluding current maturities of borrowing and accrued interest/dividend	103.28
	Provisions	16.47
	Other Current Liabilities	263.67
<b>C</b>	<b>NET CURRENT ASSETS (= A - B)*</b>	<b>(404.04)</b>
	*Figures are as per Audited Financial Statement	



**Allocation Statement - Revenue Requirement (for the year)**  
All figures in Rs Crores      Form F17

Wheeling Business		PY (2019-20)
Particulars		Trued up
	<b>Expenditure</b>	
A	Power Purchase Cost	-
B	O&M Expenses	549.12
C	Depreciation	185.46
D	ROCE	348.65
E	Carrying cost	66.02
F	Loss on Retirement	13.75
G	NTI	34.14
H	<b>Total Wheeling Business ARR</b>	<b>1,128.84</b>



Allocation Statement - Revenue Requirement (for the year)	
	All figures in Rs. Crore

Form F18

Retail Business		PY (2019-20)
Particulars		Trued Up
	Expenditure	
A	Power Purchase Cost	6,299.25
B	O&M Expenses	336.56
C	Depreciation	55.40
D	ROCE including Tax	135.58
E	Carrying Cost	300.75
F	Loss on Retirement	5.35
G	NTI	51.22
H	Total Retail Business ARR	7,081.67

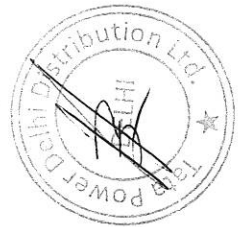


Tata Power Delhi Power Distribution Limited

Total Consumer Security Deposit including Temporary Security Deposit

Form-F19  
(Rs.Cr.)

Sl. No.	Category	PY (2019-20)			
		Actual			Closing Balance
		Opening Balance	Received	Disbursed/ Utilized	
1	Domestic	182.49	42.63	(30.62)	194.50
2	Non Domestic	260.58	64.95	(37.71)	287.82
3	Public water works	-	-	-	-
4	Public Lighting	2.82	0.92	(0.48)	3.25
5	Industrial	218.13	43.15	(29.57)	231.71
6	Agriculture	0.68	0.05	(0.05)	0.68
7	Railway Traction	4.53	-	(4.46)	0.07
8	Mushroom	0.00	0.01	(0.00)	0.01
9	Temporary Supply	-	-	-	-
10	Others	-	-	-	-
	<b>TOTAL</b>	<b>669.23</b>	<b>151.71</b>	<b>(102.89)</b>	<b>718.05</b>
11	Less- Temporary supply & Security Deposit shown as current liability	43.85			43.52
	<b>TOTAL</b>	<b>625.38</b>			<b>674.53</b>



## District-wise AT&amp;C Losses

Form 21

Sl. No.	Particulars	Actual (Previous Year)- 2019-20								
		Energy Input (MU)	Energy Billed to the Consumers (MU)	Distribution Loss (MU)	Amount Billed (Rs Cr)	Average Billing Rate (Rs / Unit)	Amount Realized (Rs/Cr)	Average Realization rate (Rs / Unit)	Units Realized (MU)	AT&C Loss (%)
1	Badli	9751.72	9085.73	6.83%	7232.97	7.96	7155.16	7.96	8987.98	7.83%
2	Bawana									
3	Civil Lines									
4	Keshav Puram									
5	Mangolpuri									
6	Model Town									
7	Moti Nagar									
8	Narela									
9	Pitam Pura									
10	Rohini									
11	Shakti Nagar									
12	Shalimar Bagh									
	<b>Total</b>	9751.72	9085.73	6.83%	7232.97	7.96	7155.16	7.96	8987.98	7.83%



**TATA POWER DELHI DISTRIBUTION LIMITED**

**Annual Revenue Requirement**

All figures in Rs Crores

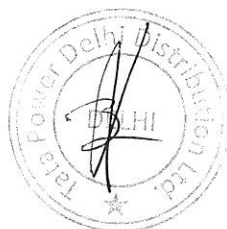
Sl. No	Particulars	EY (FY 21-22)
		Projection
1	Power Purchase (MU) at TPDDL Periphery	9,818.63
2	Sale of Power (MU)	9,052.78
3	Distribution Loss %	7.80%
3.1	Distribution Loss in Mus	765.85
3.2	Intra State	
3.3	Inter State	
1	<b>Receipts</b>	
a	Revenue from tariffs	
	i) Fixed Charges	
	ii) Energy Charges	
	iii) PPAC	
	iv) Surcharge for Regulatory Asset (8%)	
	v) Electricity Duty	
	v) Any Other Receipt	
b	Revenue subsidy from Govt.	7,166.34
	<b>Total</b>	<b>7,166.34</b>
2	<b>Expenditure</b>	
a	Purchase of Power from Long Term Sources	
b	Purchase of Power from Other than Long Term Sources	
c	Transmission Charges	
	i) Intra State	
	ii) Inter State	
d	Load Despatch Charges	6,164.68
e	O&M Expenses	
	i) R&M Expense	
	ii) Employee Expenses	
	iii) A&G Expense	
	iv) Statutory Levies, Change in Taxes, etc.	892.56
f	Depreciation	276.40
g	Carrying Cost	575.47
h	Finance Charges	
i	Less: Interest capitalised	
j	Less: Finance charges capitalised	
k	Less: O&M capitalised	
l	Extraordinary Items	
m	Other - Loss on Retirement-/ (charges)	
	<b>Total</b>	<b>7,909.12</b>
3	Return as approved/ allowed by Commission (ROCE)	514.25
4	Non Tariff Income	85.36
5	Annual Revenue Requirement (2)+(3)-(4)	8,338.01
6	Additional Impact on account of Deficit in Pension Trust	
7	Surplus(+) / Shortfall(-) : (1)-(5)+(6) before tariff revision	(1,171.66)
8	Tariff Revision - Impact	
8	Surplus(+) / Shortfall(-) : (6)-(7) after tariff revision	

**Income from investments and Non-Tariff Income**

Form No: F4

Figure in Rs Crore

Sl. No	Particulars	EY (2021-22)
		Projection
A	<b>Non Tariff Income</b>	Based on NTI offered for Trued up for FY 2019-20
	Late Payment Surcharge Collected	
	Less- LPSC financing Cost	
	Service Line Charges	
	Maintenance Charges	
	Less- Incentive On Street Light Maintenance	
	Commission on DVB arrears	
	Commission on Energy Tax Collection	
	Miscellaneous Operating Income	
	Other Non-operating Income	
	Interest on Consumer Security Deposit	
	Open Access Charges	
	<b>Sub-Total</b>	
B	<b>Other Business Income (Net)</b>	
	<b>Sub-Total</b>	
	<b>Total</b>	<b>85.36</b>



**Repair & Maintenance Expenditure****Form No: F5**

Figure in Rs Crore

Sl.No.	Particulars	EY (2021-22)
		Projection
1	Sub-Station	As per BPR 2019, R&M Expenses are allowed as a part of O&M expenses, hence separate figures are not given
	i) Owned	
	ii) Outsourced	
2	Transformer other than installed in Sub Station	
3	Building	
4	Civil Works	
5	Others Works	
6	Lines, Cables Net Works etc.	
7	Vehicles	
8	Furniture and Fixtures	
9	Office Equipments	
10	Spare Inventory for maintaining Transformer redundancy	
11	Sub station maintenance by private agencies	
	<b>Total</b>	



**Employee Cost and Provisions**

Form No: F6

Figure in Rs Crore

Particulars		EY (2021-22)
		Projection
	<b>Employee's Cost</b>	
1	Salaries	
2	Dearness Allowance	
3	Other Allowances & Relief	
a	Allowance details	
b	...	
c	....	
d		
4	Medical Expenses Reimbursement	
5	Leave Travel Assistance	
6	Fee & Honorarium	
7	Incentives/Awards Including That In Partnership Project (Specify Items)	
8	Earned Leave Encashment	
9	Tution Fee Re-Imbursement	
10	Leave Salary Contribution	
11	Payment Under Workman'S Compensation And Gratuity	
12	Subsidised Electricity To Employees	
13	Staff Welfare Expenses	
C	<b>Apprentice And Other Training Expenses</b>	
D	<b>Payment/Contribution To PF Staff Pension And Gratuity</b>	
1	Terminal Benefits	
	a) Provident Fund Contribution	
	b) Provision for PF Fund - Invested	
	Not Invested	
	c) Pension Payments	
	d) Gratuity Payment	
	e) Leave Encashment Payment	
2	Any Other Items	
	<b>Total D</b>	
E	Bonus/Exgratia To Employees	
F	<b>Grand Total</b>	
G	Chargeable To Construction Works	
	Balance Item 'F' Aproprate For (F)-(G)*	
	<i>Note: Inlcuding Interim impact of 7th Pay Commission</i>	
	<b>Relevant Indices Of Wages Increase (As At The Beginning &amp; End Of The Year)</b>	
	WPI	
	CPI	
	D.A Rate	

As per BPR 2019,  
Employee Expenses are  
allowed as a part of  
O&M expenses, hence  
separate figures are  
not given

**TATA Power Delhi Distribution Limited**

**Adminstration & General Expenses**

Form No: F7

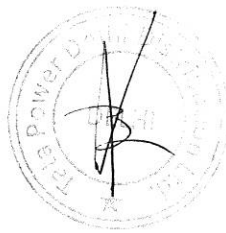
In Rs Crore

S.No.	Particulars	EY (2021-22)
		Projection
<b>A)</b>	<b>Administration Expenses</b>	
1	Rent rates and taxes (Other than all taxes on income and profit)	
2	Insurance of employees, assets, legal liability	
3	Revenue Stamp Expenses Account	
4	Telephone, Postage, Telegram, Internet Charges	
5	Incentive & Award To Employees/Outsiders	
6	Consultancy Charges	
7	Technical Fees	
8	Other Professional Charges	
9	Conveyance And Travel (vehicle hiring, running)	
10	DERC License fee	
11	Plant And Machinery	
12	Security / Service Charges Paid To Outside Agencies	
13	Regulatory Expenses	
14	Ombudsman Expenses	
15	Consumer Forum	
	<b>Sub-Total of Administrative Expenses</b>	
<b>B)</b>	<b>Other Charges</b>	
1	Fee And Subscriptions Books And Periodicals	
2	Printing And Stationery	
3	Advertisement Expenses (Other Than Purchase Related) Exhibition & Demo.	
4	Contributions/Donations To Outside Institute / Association	
5	Electricity Charges To Offices	
6	Water Charges	
7	Public Interraction Program	
8	Any Other expenses	
	<b>Sub-Total of other charges</b>	
<b>C)</b>	<b>Legal Charges</b>	
<b>D)</b>	<b>Auditor'S Fee</b>	
<b>E)</b>	<b>Frieght - Material Related Expenses</b>	
<b>F)</b>	<b>Departmental Charges</b>	
<b>G)</b>	<b>Total Charges net of Provision for Contingency</b>	
	Note : Provision for Contingencies is related to Generation Business hence excluded	
<b>H)</b>	<b>Return as approved/ allowed by Commission (ROCE)</b>	
<b>I)</b>	<b>Total Charges Chargeable to Revenue Expenses</b>	

As per BPR 2019,  
Employee Expenses are  
allowed as a part of O&M  
expenses, hence separate  
figures are not given

## Interest &amp; Finance Charges

			Particulars	Interest Rate	EY (2021-22) Projection
A	I		Interest and Finance Charges on Long Term Loans / Credits from the FIs/banks/organisations approved by the State Government		Interest on Capex Loans and Working Capital Loan is allowed as a part of ROCE, hence no separate figures are given
			Total of I (Weighted average)		
	II		Interest on Working Capital Loans Or Short Term Loans		
			Total of A : I + II		
B			<b>Other Interest &amp; Finance Charges</b>		
			1 Cost of raising Finance & Bank Charges etc.		
			2 Interest on Security Deposit		
			3 Dividend on non-convertible cumulative redeemable preference shares		
			4 Other Interest		
			Total of B		
C			Grand Total Of Interest & Finance Charges: A + B		
D			Less: Interest & Finance Charges Chargeable to Capital Account		
E			Net Total Of Interest & Finance Charges : For Revenue Account: C-D		



## Contributions towards Cost of Capital Assets

TATA POWER DELHI DISTRIBUTION LIMITED

Form No: F 13

Figures in Rs Cr.

Sl No	Particulars	Balance at the beginning of the year	Previous Year			Current Year			Ensuing Year		
			Additions during the Year	Capitalized during the year	Balance at the end of the Year	Opening Balance	Capitalized during the year	Balance at the end of the Year	Opening Balance	Capitalized during the year	Balance at the end of the Year
1	Consumer Contribution Towards Cost Of Capital Assets	868.51		32.43	900.94	900.94	32.50	933.44	933.44	50.00	983.44
	Total	868.51	-	32.43	900.94	900.94	32.50	933.44	933.44	50.00	983.44



# Allocation Statement - Revenue Requirement (for the year)

All figures in Rs Crores

Form F17

Wheeling Business		EY (2021-22)
Particulars		Projection
	Expenditure	
A	Power Purchase Cost	-
B	O&M Expenses	553.39
C	Depreciation	212.83
D	ROCE	370.26
E	Carrying cost	80.57
F	NTI	34.14
G	Total Wheeling Business ARR	1,182.90



**Allocation Statement - Revenue Requirement (for the year)**

All figures in Rs. Crore

Form F18

Retail Business		EY(2021-22)
Particulars		Projection
	Expenditure	
A	Power Purchase Cost	6,164.68
B	O&M Expenses	339.17
C	Depreciation	63.57
D	ROCE including Tax	143.99
E	Carrying Cost	494.90
F	NTI	51.22
G	Total Retail Business ARR	7,155.11



## District-wise AT&amp;C Losses

Form 21

Sl. No.	Particulars	Projected- 2021-22								
		Energy Input (MU)	Energy Billed to the Consumers (MU)	Distribution Loss (MU)	Amount Billed (Rs Cr)	Average Billing Rate (Rs / Unit)	Amount Realized (Rs/Cr)	Average Realization rate (Rs / Unit)	Units Realized (MU)	AT&C Loss (%)
1	Badli	9818.63	9052.78	7.80%	6687.08	7.39	6653.64	7.39	9007.51	8.26%
2	Bawana									
3	Civil Lines									
4	Keshav Puram									
5	Mangolpuri									
6	Model Town									
7	Moti Nagar									
8	Narela									
9	Pitam Pura									
10	Rohini									
11	Shakti Nagar									
12	Shalimar Bagh									
		9818.63	9052.78	7.80%	6687.08	7.39	6653.64	7.39	9007.51	8.26%



S. No	Category	EY (2021-22)		
		Projection		
		Projection of Sales (MU)	Projection of no. of Consumers	Projection of Connected Load (MW)
1	Domestic			
1.1	Domestic			
1.1.1				
	0-200 Units	862	7,29,584	870
	201-400 Units	1,084	3,75,428	520
	401-800 Units	661	1,35,820	214
	801-1200 Units	89	12,403	21
	>1200 Units	19	1,743	3
1.1.2	Between 2 KW to 5 KW Connected Load			
	0-200 Units	68	44,065	147
	201-400 Units	243	66,427	217
	401-800 Units	386	65,658	222
	801-1200 Units	181	21,354	76
	>1200 Units	69	5,867	23
1.1.3	5 to 15 KW Load			
	0-200 Units	23	20,224	153
	201-400 Units	81	18,558	134
	401-800 Units	209	28,567	210
	801-1200 Units	176	16,343	125
	>1200 Units	240	15,282	132
1.1.3	15 to 25 KW Load			
	0-200 Units	0	204	4
	201-400 Units	1	132	2
	401-800 Units	3	342	6
	801-1200 Units	5	320	6
	>1200 Units	38	1,291	23
1.1.3	Above 25KW			
	0-200 Units	0	70	4
	201-400 Units	0	16	1
	401-800 Units	0	51	2
	801-1200 Units	1	54	2
	>1200 Units	90	605	57
1.2	Single Delivery Point on 11 KV CGHS	24	20	10
	Adjustment on account of Solar	-10		
1.4	DVB Staff	16	3,494	10
1.5	Misuse (Domestic)			
1.6	Theft (Domestic)	10		
ed/ allowed by	Non Domestic			
2.1	Upto 3kVA	154	1,67,389	284
2.2	Above 3kVA	1,243	64,419	963
2.3	Misuse (Non Domestic)			
2.4	Theft (Non Domestic)	1		
	Adjusted towards Solar	-22		
	Adjusted towards Open Access	-2		
3	Industrial	2,491	30,347	1,323
3.4	Misuse (Industrial)			
3.5	Theft (Industrial)	0		
	Adjusted towards Solar			
	Adjusted towards Open Access	-24		
4	Agriculture			
4.1	Agriculture	15	4,350	31
4.2	Misuse (Agriculture)			
4.3	Theft (Agriculture)	0		
5	Mushroom Cultivation			
5.1	Mushroom Cultivation	0.12	13	0.16
5.2	Misuse (Mushroom Cultivation)			
5.3	Theft (Mushroom Cultivation)	0.02		
6	Public Utilities	580	6,258	192
	Adjusted towards Open Access	-68		
7	Temporary Supply			
7.1	Domestic Connections including Group Hd	36	10,940	26
7.2	For threshers during the threshing season	23	5,388	13
8	Charging Station E Rikshaw	29	685	5
	Additional Units			
	Theft (E-Vehicle)	0.1		
9	Advertisement and Hoardings	0.34	243	1
10	Self Consumption	23	382	17
11	Misuse	2		1
12	Prepaid			
	Domestic			
	Non Domestic			
13	Others	1		
14	TOTAL	9,052.78	18,54,335	6,048



Revenue from Proposed Tariff & Charges for FY 21-22

Form F-23

S. No.	Category	Consumers (Nos.)	Connected Load (KW)	Sales (MU)	Fixed Charges (Rs/kW)*	Variable Charges (Rs/Kwh)*	Revenue from Fixed Charges (Rs. Crs.)	Revenue from Variable Charges (Rs. Crs.)	Total Revenue (Rs. Crs.)
		No.	MW	MU	Fixed Charges	Energy Charges	Rs. Cr.	Rs. Cr.	Rs. Cr.
1	Domestic								
1.1	Domestic								
1.1.1	Upto 2 KW Load				Rs. 20 / kW/ month				
	0-200 Units	729584	869.60	862.46	20.00	3.00	20.87	258.74	279.61
	201-400 Units	375428	519.66	1084.12	20.00	4.50	12.47	352.70	365.17
	401-800 Units	135820	213.96	661.41	20.00	6.50	5.14	250.63	255.77
	801-1200 Units	12403	20.92	89.08	20.00	7.00	0.50	41.53	42.03
	>1200 Units	1743	2.78	18.78	20.00	8.00	0.07	10.01	10.08
1.1.2	2 to 5 KW Load				Rs. 50 / kW/ month				
	0-200 Units	44065	146.82	67.90	50.00	3.00	8.81	20.37	29.18
	201-400 Units	66427	217.49	242.86	50.00	4.50	13.05	85.37	98.42
	401-800 Units	65658	222.15	385.72	50.00	6.50	13.33	164.05	177.38
	801-1200 Units	21354	76.15	180.76	50.00	7.00	4.57	89.31	93.88
	>1200 Units	5867	22.72	68.73	50.00	8.00	1.36	37.55	38.91
1.1.3	5 to 15 KW Load				Rs. 100 / kW/ month				
	0-200 Units	20224	152.61	23.34	100.00	3.00	18.31	7.00	25.31
	201-400 Units	18558	134.01	80.91	100.00	4.50	16.08	29.73	45.81
	401-800 Units	28567	210.32	208.94	100.00	6.50	24.24	91.60	116.84
	801-1200 Units	16343	125.35	175.66	100.00	7.00	15.01	93.54	108.59
	>1200 Units	15282	131.66	240.20	100.00	8.00	15.80	142.64	158.44
1.1.4	15 to 25 KW Load				Rs. 200 / kW/ month				
	0-200 Units	204	3.60	0.15	200.00	3.00	0.86	0.04	0.91
	201-400 Units	132	2.35	0.55	200.00	4.50	0.56	0.20	0.76
	401-800 Units	342	6.02	3.31	200.00	6.50	1.45	1.70	3.14
	801-1200 Units	320	5.64	4.98	200.00	7.00	1.35	2.95	4.30
	>1200 Units	1291	23.48	37.50	200.00	8.00	5.64	25.82	31.45
1.1.5	Above 25KW				Rs. 250 / kW/ month				
	0-200 Units	70	3.91	0.01	250.00	3.00	1.17	0.00	1.17
	201-400 Units	16	0.66	0.04	250.00	4.50	0.20	0.01	0.21
	401-800 Units	51	2.02	0.26	250.00	6.50	0.61	0.10	0.71
	801-1200 Units	54	2.02	0.51	250.00	7.00	0.60	0.26	0.86
	>1200 Units	605	56.75	90.22	250.00	8.00	17.02	70.21	87.24
1.2	Single Point Delivery Supply for GHS	70	10.32	24.15	150.00	4.50	1.86	5.72	7.57
	Adjustment on account of Solar			-10.00					
	Enforcement - Domestic (See Note 3)			9.87		8.75	0.00	8.63	8.63
2	Non-Domestic								
2.1	Upto 3KVA								
2.2	Return as approved/ allowed by Cui	167389	201.13	153.08	250.00	6.00	85.24	86.21	171.45
	Peak Hours (ToD)	64419	962.51	1243.39	250.00	8.50	288.75	1087.92	1376.67
	Off-Peak Hours (ToD)								
	Adjusted towards Solar			-22.00					0.00
	Adjusted towards Open Access			-2.00					0.00
	Enforcement - Non-Domestic (See Note 3)			1.07		21.84	0.00	2.34	2.34
3	Industrial	30347	1,322.62	2491.17	250.00	7.75	396.78	1966.52	2363.30
	Peak Hours (ToD)						0.00		0.00
	Off-Peak Hours (ToD)						0.00		0.00
	Adjusted towards Solar			-24.00					0.00
	Adjusted towards Open Access			0.41		18.73	0.00	0.77	0.77
	Enforcement - Industrial (See Note 3)			0.00					0.00
4	Agriculture	4350	30.84	15.34	125.00	1.50	4.63	2.30	6.93
4.1	Peak Hours (ToD)								
4.2	Off-Peak Hours (ToD)								
	Enforcement - Agriculture (See Note 3)			0.08		13.85	0.00	0.11	0.11
5	Mushroom Cultivation	13	0.16	0.12	200.00	3.50	0.04	0.04	0.08
5.1	Peak Hours (ToD)								
5.2	Off-Peak Hours (ToD)								
	Enforcement - Mushroom Cultivation (See Note 3)			0.02					0.00
6	Public Utilities	6258	192.24	580.46	250.00	6.25	57.67	347.38	405.05
6.1	Peak Hours (ToD)						0.00		0.00
6.2	Off-Peak Hours (ToD)						0.00		0.00
	Adjusted towards Solar			0.00					0.00
	Adjusted towards Open Access			-68.00					0.00
	Enforcement - Public Utilities (See Note 3)			0.00					0.00
8	Advertisement & Hoardings	243	0.52	0.34	250.00	8.50	0.16	0.30	0.45
8.1	Peak Hours (ToD)								
8.2	Off-Peak Hours (ToD)								
	Enforcement - Advertisement & Hoardings (See Note 3)			0.00					
9	Temporary Supply								
9.1	Domestic Connections including Gro	10940	25.79	36.23	195.00	5.85	6.03	21.19	27.23
9.2	For threshers during the threshing s	5388	12.70	23.16	195.00	8.45	0.00	19.57	19.57
9.3	All other connections including construction projects								
10	Charging Stations for E-Rickshaw/ E-Vehicle on Single Delivery Point								
10.1	Supply at LT	685	5.27	29.48		4.50	0.00	13.27	13.27
10.1.1	Peak Hours (ToD)	0		0.00			0.00		
10.1.2	Off-Peak Hours (ToD)	0		0.00			0.00		
10.2.1	Supply at HT	0		0.00		4.00			
	Enforcement			0.07					
	Additional Units								
11	Own Consumption(See Note 4)								
11	Own Consumption(See Note 4)	382	17.46	22.57			0.00	0.00	0.00
				0.00			0.00	0.00	0.00
12	Staff	3494	9.51	15.98		3.08		4.92	4.92
	MISUSE		1.00	1.76		16	1.56	2.82	4.38
				0.00					
14.1	Prepaid - Domestic (See Note 5)								
14.2	Prepaid - Non Domestic (See Note 5)								
15	Other Adjustments (See Note 6)			0.75					
16	Collection where Rate Category not found								
17	(-)Open Access Charges								
	Grand Total	1854335	6,048	9,053		1043	5346		6389

