

MADHYANCHAL VIDYUT VITRAN NIGAM LIMITED

TRUE-UP PETITION FOR FY 2020-21, APR
PETITION FOR FY 2021-22 AND ARR &
TARIFF PETITION FOR FY 2022-23 OF THE
CONTROL PERIOD FROM FY 2020-21 TO FY
2024-25



MADHYANCHAL VIDYUT VITRAN NIGAM LIMITED

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List of abbreviations

Abbreviation	Full Form
A&G	Administration & General
ACoS	Average Cost of Supply
Act	The Electricity Act, 2003
APR	Annual Performance Review
ARR	Aggregate Revenue Requirement
ATE	Appellate Tribunal of Electricity
BPL	Below Poverty Line
BST	Bulk Supply Tariff
CAGR	Compound Annualized Growth rate
Capex	Capital Expenditure
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CGRF	Consumer Grievance Redressal Forum
CGS	Central Generating Stations
COD	Commercial Operation Date
Commission	Uttar Pradesh Electricity Regulatory Commission
Cr	Crore
DBST	Differential Bulk Supply Tariff
Discom/DisCom	Distribution Company
DSM	Deviation Settlement Mechanism
EA 2003	The Electricity Act, 2003
EHT	Extra High Tension
ERP	Enterprise Resource Planning
FPPCA	Fuel and Power Purchase Cost Adjustment
FY	Financial Year
GFA	Gross Fixed Assets
GoUP	Government of Uttar Pradesh
HP	Horsepower
HT	High Tension
IEX	Indian Energy Exchange Limited
IPDS	Integrated Power Development Scheme
IPP	Independent Power Producer
ISTS	Inter-State Transmission System
KVA	Kilo Volt Ampere
kWh	Kilo Watt Hour

LT	Low Tension
MOD	Merit Order Dispatch
MU	Million Units
MW	Mega Watt
MYT	Multi-Year Tariff
NFA	Net Fixed Assets
NTPC	National Thermal Power Corporation
O&M	Operation and Maintenance
PGCIL	Power Grid Corporation of India Ltd.
PLF	Plant Load Factor
PLR	Prime Lending Rate
POSOCO	Power System Operation Corporation Limited
PPA	Power Purchase Agreement
R&M	Repair and Maintenance
R-APDRP	Restructured Accelerated Power Development and Reforms Programme
REC	Renewable Energy Certificate
RLDC	Regional Load Dispatch Centre
RoE	Return on Equity
RPO	Renewable Purchase Obligation
SBI PLR	SBI Prime Lending Rate
SERC	State Electricity Regulatory Commission
SLDC	State Load Dispatch Centre
SLM	Straight Line Method
SOP	Standard of Performance
T&D	Transmission & Distribution
UI	Unscheduled Interchange
UPERC	Uttar Pradesh Electricity Regulatory Commission
WDV	Written Down Value

1. Background and Procedural History

1.1. Background

- 1.1.1. Madhyanchal Vidyut Vitran Nigam Limited (herein after referred to as “Lucknow” Discom or MVVNL) came into existence in 2003 as a subsidiary company of UPPCL and is responsible for power distribution in Discom covering its jurisdiction area of districts Badaun, Bareilly, Pilibhit, Shahjahanpur, Lakhimpur, Hardoi, Sitapur, Unnao, Bahraich, Shrawasti, Balrampur, Gonda, Barabanki, Rae Bareli, Faizabad, Sultanpur, Ambedkarnagar, Lucknow and Chhatrapati Sahuji Maharaj Nagar.

1.2. Distribution Tariff Regulations

- 1.2.1. The Hon’ble Commission notified the UPERC (Multi Year Tariff for Distribution and Transmission) Regulations, 2019 (hereinafter referred to as “MYT Regulations 2019”) which will be applicable for determination of tariff from April 1, 2020 and onwards up to FY 2024-25 [i.e., till March 31, 2025] unless extended by the Order of the Hon’ble Commission. These Regulations were signed on 23rd September 2019, however, were finally published on Hon’ble Commission’s website on 21st November 2019, after gazette notification.
- 1.2.2. This regulation is applicable for the purposes of Multi-Year Annual Revenue Requirement (ARR) filing and Tariff determination of all the distribution licensees within the State of Uttar Pradesh.

1.3. Petitions and Orders till now during the Control Period from FY 2020-21 to FY 2024-25

- 1.3.1. The Petitioner had submitted its Business Plan Petition for the Control Period from FY 2020-21 to FY 2024-25 on 28 February 2020 and ARR and Tariff Petition for FY 2020-21 (including True-up for FY 2018-19 and APR for FY 2019-20) on 30 June 2020. In response to the same, the Hon’ble Commission has issued Business Plan Order on 27 October 2020 and Order for True-up for FY 2018-19, APR for FY 2019-20 and ARR & Tariff for FY 2020-21 on 11 November 2020.
- 1.3.2. Hon’ble Commission has issued Order for True-up for FY 2019-20, APR for FY 2020-21 and ARR & Tariff for FY 2021-22 on 29 July 2021.

1.4. ARR and Tariff Petition for FY 2022-23 (including True-up for FY 2020-21 and APR for FY 2021-22)

- 1.4.1. The Petitioner had sought additional time from Hon’ble Commission in providing the data under Additional MYT Format as required by Hon’ble Commission. Accordingly, the Petitioner is hereby submitting the audited True-up for FY 2020-21, APR petition for FY 2021-22 and ARR petition for FY 2022-23 under UPERC MYT Regulations, 2019 along with the prescribed tariff formats.

2. True Up for FY 2020-21

2.1. Consumption Parameters: Consumer Numbers, Connected Load and Sales

2.1.1. The actual consumption parameters for FY 2020-21 is in the range of the numbers approved by Hon'ble Commission vide Tariff Order dated 11.11.2020. Further some differences are observed in the actual consumption parameters vis-à-vis consumption parameters approved by Hon'ble Commission in some categories due to unavoidable circumstances of Covid pandemic and lockdown across the state of Uttar Pradesh. Further, sale is derivative of demand which is also uncontrollable in nature due to which reduction in sales has been noticed in LMV-1. The Category-wise approved consumption parameters vis-à-vis actual consumption parameters for FY 2020-21 is shown in the Table below:

Table 2-1: Actual consumption Parameters for FY 2020-21

Category	Approved			Actual		
	Consumers (Nos)	Load (kW)	Sales (MU)	Consumers (Nos)	Load (kW)	Sales (MU)
LMV-1 Domestic light fan & power	5235515	7056838	8866	7,343,592	8,944,695	10,516.66
LMV-2-Non domestic light fan & power	382696	1086210	1304	383,655	1,105,089	1,430.94
LMV-3 Public lamps	1403	104313	373	1,160	79,588	296.74
LMV-4 Light, fan & power for public/private institution	23649	146339	199	26,908	146,016	244.20
LMV-5 Private tube well/pumping sets	232269	1020119	1746	235,413	1,273,069	2,162.90
LMV-6 Small & medium power upto 100 hp/75kw	22120	278850	512	27,321	296,365	473.68
LMV-7 Public water works	3716	112853	499	3,627	90,603	383.31
LMV-8 State tube wells & pumps canal upto 100 hp (lmv-8)	10002	200520	905	10,715	154,287	879.10
LMV-9 Temporary supply	5615	56828	75	6,181	19,472	37.71
LMV- 10 Departmental employees	27560	88240	215	23,825	76,543	137.67
LMV -11 Electrical Vehicles	0	0	0	-	-	-
HV-1 Non industrial bulk load	1203	418046	661	1,344	457,338	684.47
HV-2 Large & heavy power above 100 bhp (75 kw)	2156	891062	1318	2,201	793,287	1,415.10
HV-3 Railway traction	3	20000	36	2	10,500	26.29
HV-4 Lift irrigation & p. canal above 100 bhp (75kw)	10	9082	80	33	28,561	67.69

Category	Approved			Actual		
	Consumers (Nos)	Load (kW)	Sales (MU)	Consumers (Nos)	Load (kW)	Sales (MU)
Bulk Supply	0	0	0	0	0	0
Extra State Consumer	1	5000	24	1	5,000	8.78
Total	8169573	14338456	18939	8,065,978	13,480,413	18,765.24

2.1.2. Further, as directed by Hon'ble Commission in Tariff order dated 29.7.2021, the Petitioner has taken care about booking the sales under unmetered categories. The sale booked under the unmetered categories are as per the norms approved by the Hon'ble Commission in its order dated 09.12.2016 and as considered by the Hon'ble Commission in its order dated 18.08.2021 in the matter of P. No. 1718 of 2021.

2.1.3. The Hon'ble Commission is requested to approve the actual consumption parameters as submitted in the above table.

2.2. Distribution Losses

2.2.1. UP State owned Distribution Licensee are in process of formulation of Revamp Distribution Sector Scheme in the State. Accordingly, based on the actual distribution loss of the Discom, MVVNL has estimated the Loss trajectories for the Coming years for the implementation of the scheme, same is as under:

Table 2-2 Discom wise Distribution Loss Trajectory as per Action Plan

Discoms	FY 2020-21	FY 2021-22	FY 2022-23
MVVNL	20.22%	19.19%	17.21%

2.2.2. In this regard it is noteworthy that, Ministry of Power after considering the ground realities which have impacted UP Discom's efforts towards achieving the loss trajectory agreed under the MoU by its letter No.06/01(01)/2020 NEF(U) dated 06.03.2020 has sought for a revised action plan for reduction in distribution losses including AT&C loss trajectory from the Government of U.P. This evinces that the loss trajectory agreed under the UDAY MoU is not sacrosanct, since the same was based on then existing facts and circumstances, which have substantially changed presently.

2.2.3. It is further submitted that the distribution loss trajectory for the period FY 2020-21 to FY 2024-25 was approved by the Hon'ble Commission in its Business Plan Order dated 27.10.2020. The Hon'ble Commission has not deliberated upon the same in the Tariff Order for FY 2021-22 and merely held that distribution loss trajectory as approved in Order dated 27.10.2020 will be applicable for FY 2021-22.

2.2.4. Moreover, the primary objective of UDAY scheme was to reduce AT&C losses which includes distribution loss as well as collection efficiency. While reduction in AT&C losses may be possible to the extent mentioned in UDAY scheme due to factors like improvement in collection efficiency, reduction in distribution losses are not feasible to that extent. It is also submitted that while the Hon'ble Commission has approved the Distribution losses in accordance with the trajectory as per the UDAY MoU, the Hon'ble Commission has not adopted the collection efficiency as per the UDAY agreement and has been issuing Tariff Orders on 100% collection efficiency, thereby partially adopting the UDAY agreement. In view of the above, the approved

trajectory of distribution losses in Business Plan order dt. 27.10.2020 is neither achievable nor based on the adoption of UDAY agreement in totality. Even the MYT Regulations, 2014 provision related to sharing of difference of AT&C loss, was also not allowed by Hon'ble Commission in the True-Up Orders despite Licensee request. Therefore, considering only selected parameters of UDAY scheme has caused huge financial loss to Discom. Therefore, Hon'ble Commission was also requested to delink the distribution losses for new control period from the normative losses approved for previous control period. This request of Licensee is supported by the fact that MYT Regulations of Hon'ble Commission are also changed at the start of new control period on the change of facts and circumstances experienced during the previous control period. Many provisions related to Financial impact have been changed by Hon'ble Commission in MYT Regulation 2019 as compared to previous MYT Regulation. Accordingly, the changed facts and circumstances related to distribution loss trajectory should be considered.

- 2.2.5. In addition to the above it is pertinent to mention that provisions relating to sharing of distribution loss and AT&C loss does not exist in the UPERC MYT Regulations, 2019. Hence, Petitioner would not be able to claim any sharing on account of distribution losses during the control period FY 2020-21 to FY 2024-25. Therefore, the Petitioner has to propose the distribution loss trajectory on the basis of actual loss level of FY 2020-21, and which the Petitioner can possibly achieve, otherwise it will result in significant under recovery of power purchase cost.
- 2.2.6. It is submitted that considering the abovementioned ground realities and the significant impact of Covid-19 pandemic and further reduction in C&I category consumption and subsequent increase in the consumption at LT network such as Domestic consumer categorises has adversely impacted on the overall distribution loss of the petitioner. Therefore, considering the actual Covid-19 scenarios and its impact on the distribution loss of subsequent years, the petitioner further requests the Hon'ble commission to approve the Distribution loss trajectory as proposed in the petition.
- 2.2.7. It is a settled position that normative parameters under the MYT Order and Tariff Regulations ought to be fixed considering past performance (i.e., it should be relatable to past performance), actuals of the previous control period and it should be capable of achievement. In this regard the following is noteworthy: -

- (a) Clause 5.11(f) of Tariff Policy 2016 which lays down the framework for determination of operating norms for distribution tariff: -

“5.11 Tariff policy lays down the following framework for performance based cost of service regulation in respect of aspects common to generation, transmission as well as distribution. These shall not apply to competitively bid projects as referred to in para 6.1 and para 7.1 (6). Sector specific aspects are dealt with in subsequent sections.

f) Operating Norms

Suitable performance norms of operations together with incentives and disincentives would need to be evolved along with appropriate arrangement for sharing the gains of efficient operations with the

consumers. Except for the cases referred to in para 5.11(h)(2), the operating parameters in tariffs should be at “normative levels” only and not at “lower of normative and actuals”. This is essential to encourage better operating performance. The norms should be efficient, relatable to past performance, capable of achievement and progressively reflecting increased efficiencies and may also take into consideration the latest technological advancements, fuel, vintage of equipments, nature of operations, level of service to be provided to consumers etc. Continued and proven inefficiency must be controlled and penalized.”

- (b) In terms of Clause 8.2 of the Tariff Policy 2016 The Hon’ble Commission is mandated to set an achievable distribution loss trajectory: -

“8.2 Framework for revenue requirements and costs 8.2.1 The following aspects would need to be considered in determining tariffs:

.....

(2) AT&C loss reduction should be incentivised by linking returns in a MYT framework to an achievable trajectory. Greater transparency and nurturing of consumer groups would be efficacious.

- 2.2.8. In view of the above it is submitted that the distribution loss trajectory is also a normative parameter for determination of distribution tariff and hence for FY 2021-22 the same ought to have been relatable to past performance of the Discoms and capable of achievement. A table evincing the actual distribution losses of the Petitioner in the previous control period (i.e. FY 2018-2020) vis-à-vis the loss trajectory approved by the Hon’ble Commission is as below: -

Table 2-3 Actual Discom losses in control period FY 2017-2019

Discom	FY 2017-18			FY 2018-19			FY 2019-20		
	As per UDAY Scheme	As per MYT Order	Actual	As per UDAY Scheme	As per MYT Order	Actual	As per UDAY Scheme	As per MYT Order	Actual
MVVNL	19.16%	19.16%	22.19%	16.09%	16.09%	21.56%	11.80%	11.80%	19.37%

- 2.2.9. In view of the above it is evident that in the past years (i.e. FY 2018-20) the actual distribution loss of the Petitioner was in the range of 21.56% to 22.19%. However, the Hon’ble Commission for FY 2020-21 has fixed a stringent and practically unachievable distribution loss trajectory for the Discoms, which is approximately 50% less than the actuals of the last fiscal year (i.e. FY 2019-20) and what was claimed by the Petitioner. There is no possible way that the Petitioner can achieve the loss trajectory approved by the Hon’ble Commission. It is pertinent to note that even the Hon’ble Commission in the True-up Order for FY 2018-19 has itself accepted that it approves a stringent distribution loss trajectory for the Petitioner, which is much lower than the actual losses of the Discoms: -

“6.7.40. In past, the Commission has approved several schemes for theft reduction and power quality improved like replacement of LT lines with ABC conductor, whose CAPEX was allowed in the ARR considering the merit of the schemes and benefits to both Discoms and also considering the fact that the Commission approves a stringent Distribution Loss trajectory in the ARR, which is much lower than the actual losses of the Discoms and such schemes like ABC cables should be allowed to encourage and support the Discoms/utilities efforts to reduce the losses and meet the Commission target.”

- 2.2.10. Hence, an impossible and impractical distribution loss trajectory would further impact the financial situation of the Licensees as it has a huge long-term impact on the Discoms and would result in severe under recovery of power purchase cost. Hence it is requested to Hon’ble Commission to approve the actual distribution loss as claimed by the Petitioner.
- 2.2.11. The actual voltage-wise distribution losses are submitted below for kind perusal of Hon’ble Commission.

S.No.	Voltage Level	Actual (MUs)
A	System Losses At 220 kV	
1	Energy received into the system	9.31
2	Energy sold at this voltage level	9.31
3	Energy transmitted to the next (lower) voltage level	0.00
4	Energy Lost	0.00
5	Total Loss in the system (4/1)*100%	0.00%
B	System Losses At 132 kV	
1	Energy received into the system	82.17
2	Energy sold at this voltage level	82.17
3	Energy transmitted to the next (lower) voltage level	0.00
4	Energy Lost	0.00
5	Total Loss in the system (4/1)*100%	0.00%
C	System Losses At 33 kV	
1	Energy received into the system	23,429.49
2	Energy sold at this voltage level	528.82
3	Energy transmitted to the next (lower) voltage level	22,725.49
4	Energy Lost	175.18
5	Total Loss in the system (4/1)*100%	0.75%
D	System Losses at 11 kV & LT	
1	Energy received into the system	22,725.49
2	Energy sold at this voltage level	18,144.93
3	Energy transmitted to the next (lower) voltage level	0.00
4	Energy Lost	4,580.56
5	Total Loss in the system (4/1)*100%	20.16%
E	Overall Losses	
1	Energy In (A1+B1+C1)	23,520.97
2	Energy Out (A2+B2+C2+D2))	18,765.22
3	Total T&D Loss ((1-2)/1)*100%	20.22%

2.3. Energy Balance

- 2.3.1. It is pertinent to mention that provisions relating to sharing of gains/loss on account of distribution losses and AT&C losses does not exist in the UPERC MYT Regulations, 2019 which were existing in the erstwhile UPERC MYT Distribution Tariff Regulations, 2014. It is due to this the Petitioner would not be able to claim sharing of gains/loss on account of variation in distribution losses during the control period from FY 2020-21 to FY 2024-25. Thus, the petitioner is compelled to claim the actual distribution loss for FY 2020-21. Hon'ble Commission is requested to consider the submission of the Petitioner and allow actual loss for FY 2020-21.
- 2.3.2. The Energy Balance approved by the Hon'ble Commission vis-à-vis actual/claimed Energy Balance for FY 2020-21 is shown in the Table below:

Table 2-4 : Energy Balance for FY 2020-21

Particulars	Approved in T.O. dt. 11.11.2020	Actual / Claimed
Retail Sales (MU)	18,939	18,765
Distribution Losses (%)	11.51%	20.22%
Energy at DISCOM Periphery for Retail Sales (MU)	21,402	23,521
Intra-State Transmission Losses %	3.40%	3.37%
Energy Available at State periphery for Transmission (MU)	22,156	24,341
Inter State Losses (MU)	242	568
Inter-State Transmission Losses % (% has been computed on total energy)	2.88%	2.28%
Purchases Required & Billed Energy (MU)	22,398	24,909

2.4. Power Purchase Expense

2.4.1. Generating Station wise breakup of quantum and power purchase cost for FY 2020-21 is as follows:

Table 2-5 Generating Station-wise Power Purchase Cost for FY 2020-21

S.No	Source of Power (Station wise)	FY 2020-21									
		Units (MU)	Annual Fixed Charges		Annual Energy/ Variable charge		Annual Other Cost		Late payment Surcharge	Total cost	
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)		(Rs. Cr.)	(Rs. / kWh)
A	Long term Sources										
a	Power procured from own Generating Stations (if any)	-									
b	From State Generating Stations Thermal										
1	ANPARA-A	3,142.61	0.79	246.77	1.94	610.19	-	-	-	2.73	856.95
2	ANPARA-B	6,982.16	0.44	307.88	1.77	1,237.59	0.00	1.55	-	2.22	1,547.02
3	PANKI	-	-	-	-	-	-	-	-	-	-
4	PARICHHA	-	-	-	-	-	-	-	-	-	-
5	PARICHHA EXT.	1,241.70	2.69	333.66	3.73	463.15	-	-	-	6.42	796.81
6	OBRA-A	-	-	-	-	-	-	-	-	-	-
7	OBRA-B	4,193.67	0.80	333.46	2.44	1,024.63	-	-	-	3.24	1,358.09
8	HARDUAGANJ	-	-	16.49	-	-	-	-	-	-	16.49
9	HARDUAGANJ EXT.	1,958.21	2.72	532.38	3.64	713.41	0.03	5.84	-	6.39	1,251.63
10	PARICHHA EXT. STAGE-II	2,071.46	2.41	498.79	3.74	774.15	-	-	-	6.15	1,272.94
11	ANPARA-D	3,798.35	1.62	616.89	1.79	678.29	-	-	-	3.41	1,295.17
12	UPRVUNL CONSOLIDATED	-	-	-	-	-	-	296.78	-	-	296.78
	Sub-Total	23,388.16	1.23	2,886.31	2.35	5,501.40	0.13	304.17	-	3.72	8,691.88
c	From State Generating Stations Hydro		-		-		-			-	
1	RIHAND	645.77	0.25	16.42	1.18	75.89	0.02	1.60	-	1.45	93.91
2	OBRA (H)	334.53	0.26	8.76	0.78	25.96	0.02	0.51	-	1.05	35.22
3	MATATILA	74.25	0.37	2.76	0.79	5.87	0.00	0.00	-	1.16	8.64
4	KHARA	255.87	0.48	12.30	0.48	12.40	0.01	0.34	-	0.98	25.04

S.No	Source of Power (Station wise)	FY 2020-21									
		Units (MU)	Annual Fixed Charges		Annual Energy/ Variable charge		Annual Other Cost		Late payment Surcharge	Total cost	
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)		(Rs. Cr.)	(Rs. / kWh)
5	UGC	26.25	-	-	2.83	7.43	-	-	-	2.83	7.43
6	SHEETLA	2.38	-	-	1.93	0.46	-	-	-	1.93	0.46
7	BELKA	3.18	-	-	1.78	0.56	-	-	-	1.78	0.56
8	BABAIL	0.52	-	-	3.14	0.16	4.46	0.23	-	7.60	0.39
	UPJVNL CONSOLIDATED	(0.43)	-	-	-	-	1.17	-0.05	-	1.17	-0.05
	Sub-Total	1,342.32	0.30	40.24	0.96	128.73	0.02	2.63	-	1.28	171.61
d	From Central Sector Generating Stations		-	-	-	-	-	-	-	-	-
a	Thermal (NTPC)		-	-	-	-	-	-	-	-	-
1	ANTA GPS	232.16	2.16	50.10	4.46	103.61	0.02	0.42	-	6.64	154.13
2	AURAIYA GPS	351.88	2.83	99.74	4.89	172.13	0.19	6.66	-	7.92	278.52
3	DADRI GPS	788.91	1.34	105.98	3.80	299.71	0.10	7.56	-	5.24	413.24
4	FGUTPS-1	853.55	1.99	169.66	3.16	270.02	0.23	19.61	-	5.38	459.29
5	FGUTPS-2	416.03	2.05	85.43	3.22	134.14	0.29	12.26	-	5.57	231.83
6	FGUTPS-3	252.00	2.23	56.26	3.30	83.18	0.39	9.77	-	5.92	149.20
7	FGUTPS-4	932.98	2.47	230.59	3.19	297.51	0.22	20.14	-	5.88	548.25
8	FSTPS	221.54	0.79	17.46	2.76	61.25	-0.00	-0.03	-	3.55	78.67
9	KHTPS-1	349.51	1.34	46.86	2.35	82.20	0.01	0.34	-	3.70	129.40
10	KHTPS-2	1,034.33	1.34	138.77	2.30	237.56	0.02	2.04	-	3.66	378.38
11	NCTPS-1	474.46	1.08	51.05	3.21	152.52	0.01	0.61	-	4.30	204.19
12	NCTPS-2	272.36	3.95	107.53	3.73	101.46	0.28	7.52	-	7.95	216.50
13	RIHAND-1	2,072.17	0.83	172.42	1.51	312.87	0.00	0.51	-	2.34	485.80
14	RIHAND-2	2,305.79	0.61	141.57	1.47	339.18	0.03	6.68	-	2.11	487.43
15	RIHAND-3	2,463.34	1.28	314.55	1.52	373.20	0.01	3.41	-	2.81	691.16
16	SINGRAULI	4,967.57	0.65	323.14	1.48	733.42	-	-	-	2.13	1,056.55
17	TANDA TPS	1,400.13	2.40	335.96	3.47	486.13	0.13	18.67	-	6.00	840.76
18	JHANOR GPS	1.79	0.96	0.17	2.02	0.36	-0.00	-0.00	-	2.97	0.53
19	KORBA-I STPS	17.93	0.62	1.11	1.45	2.59	0.01	0.02	-	2.07	3.72
20	KORBA-III STPS	9.29	1.18	1.10	1.47	1.37	0.03	0.03	-	2.69	2.50

S.No	Source of Power (Station wise)	FY 2020-21									
		Units (MU)	Annual Fixed Charges		Annual Energy/ Variable charge		Annual Other Cost		Late payment Surcharge	Total cost	
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)		(Rs. Cr.)	(Rs. / kWh)
21	KAWAS GPS	2.00	0.75	0.15	2.03	0.40	-0.00	-0.00	-	2.78	0.55
22	MAUDA-I STPS	5.12	5.97	3.06	3.19	1.63	0.19	0.10	-	9.35	4.79
23	MAUDA-II STPS	10.49	3.60	3.78	3.17	3.33	0.04	0.05	-	6.82	7.15
24	SOLAPUR TPS	5.10	7.33	3.74	3.65	1.86	-0.00	-0.00	-	10.98	5.60
25	SIPAT-I	35.16	1.16	4.09	1.53	5.39	0.02	0.08	-	2.72	9.56
26	SIPAT-II STPS	11.49	1.18	1.36	1.56	1.80	0.01	0.01	-	2.76	3.17
27	VINDHYACHAL-I STPS	17.01	0.84	1.43	1.72	2.93	-	-	-	2.56	4.36
28	VINDHYACHAL-II STPS	12.60	0.67	0.85	1.65	2.08	0.00	0.00	-	2.33	2.93
29	VINDHYACHAL-III STPS	14.29	0.96	1.38	1.66	2.37	0.00	0.01	-	2.63	3.75
30	VINDHYACHAL-IV STPS	16.12	1.64	2.65	1.69	2.73	0.01	0.01	-	3.34	5.39
31	VINDHYACHAL-V STPS	9.36	1.63	1.53	1.74	1.62	-	-	-	3.37	3.15
32	GADARWARA STPS-I	8.87	3.45	3.06	2.97	2.64	-0.01	-0.01	-	6.41	5.69
33	LARA STPS-I	17.18	2.29	3.94	2.30	3.96	-0.00	-0.00	-	4.60	7.89
34	KHARGONE STPS	11.55	4.08	4.71	3.02	3.49	-0.02	-0.02	-	7.08	8.18
35	Tanda Stage II	2,599.88	1.83	475.38	2.73	709.80	0.04	11.38	-	4.60	1,196.56
36	NTPC CONSOLIDATED	-	-	-	-	-	-	-196.91	718.64	-	521.73
	Sub-total	22,193.95	1.33	2,960.55	2.25	4,990.46	-0.03	-69.10	718.64	3.88	8,600.55
e	NPCIL		-		-		-			-	
1	KAPS	5.26	-	-	2.30	1.21	-0.11	-0.06	-	2.19	1.15
2	NAPP	1,021.68	-	-	3.03	309.23	-0.01	-0.71	-	3.02	308.53
3	TAPP-3 & 4	17.86	-	-	2.84	5.07	-0.11	-0.20	-	2.72	4.87
4	RAPP-3 & 4	539.53	-	-	3.28	177.22	-0.01	-0.37	425.10	11.16	601.94
5	RAPP-5 & 6	753.37	-	-	3.85	290.22	-2.70	-203.50	-	1.15	86.71
	Sub-Total	2,337.70	-	-	3.35	782.95	-0.88	-204.84	425.10	4.29	1,003.20
f	Hydro (NHPC)		-		-		-			-	
1	SALAL	238.16	0.76	18.04	0.66	15.81	1.66	39.49	-	3.08	73.35
2	TANAKPUR	78.68	2.23	17.52	1.68	13.23	0.00	0.01	-	3.91	30.76
3	CHAMERA-I	453.15	0.86	39.08	1.19	53.78	-0.00	-0.07	-	2.05	92.79

S.No	Source of Power (Station wise)	FY 2020-21									
		Units (MU)	Annual Fixed Charges		Annual Energy/ Variable charge		Annual Other Cost		Late payment Surcharge	Total cost	
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)		(Rs. Cr.)	(Rs. / kWh)
4	URI	576.23	0.87	50.38	0.85	49.00	0.08	4.65	-	1.81	104.03
5	CHAMERA-II	164.11	1.33	21.88	1.18	19.30	0.07	1.12	-	2.58	42.30
6	DHAULIGANGA	280.68	1.31	36.76	1.31	36.76	-0.00	-0.06	-	2.62	73.46
7	DULHASTI	579.14	2.44	141.55	2.63	152.19	0.12	6.88	-	5.19	300.62
8	SEWA-II	96.01	2.27	21.77	2.65	25.42	0.14	1.35	-	5.06	48.54
9	CHAMERA-III	241.08	2.26	54.49	2.08	50.11	0.00	0.03	-	4.34	104.63
10	URI-II	362.50	2.09	75.65	1.98	71.78	0.15	5.46	-	4.22	152.89
11	PARBATI-III	152.66	4.43	67.57	1.74	26.53	0.00	0.06	-	6.17	94.17
12	KISHANGANGA	499.66	1.93	96.19	2.11	105.49	0.03	1.46	-	4.07	203.13
13	NHPC CONSOLIDATED	-	-	-	-	-	-	60.55	111.22	-	171.77
	Sub-Total	3,722.06	1.72	640.89	1.66	619.40	0.32	120.92	111.22	4.01	1,492.43
g	HYDRO (NTPC)		-		-		-			-	
1	KOLDAM HPS	670.88	2.52	168.74	2.62	176.04	-	-	-	5.14	344.78
2	SINGRAULI SHPS	25.49	7.99	20.37	3.39	8.64	0.02	0.06	-	11.41	29.07
	Sub-Total	696.37	2.72	189.11	2.65	184.68	0.00	0.06	-	5.37	373.85
h	THDC		-		-		-			-	
	HYDRO		-		-		-			-	
1	TEHRI	1,201.79	2.01	241.43	1.99	238.68	-0.09	-10.71	-	3.91	469.40
2	KOTESHWAR	493.90	2.31	113.85	2.24	110.40	-3.82	-188.70	582.18	12.51	617.73
3	DHUKWAN	70.90	-	-	4.92	34.87	-	-	-	4.92	34.87
	Sub-Total	1,766.59	2.01	355.28	2.17	383.95	-1.13	-199.40	582.18	6.35	1,122.00
i	SJVN		-		-		-			-	
1	RAMPUR	321.26	2.50	80.37	1.61	51.58	0.49	15.84	26.23	5.42	174.03
2	NATHPA JHAKRI	1,248.30	1.31	163.60	0.82	101.96	0.02	2.93	-	2.15	268.48
	Sub-Total	1,569.56	1.55	243.97	0.98	153.54	0.12	18.77	26.23	2.82	442.51
j	NEEPCO		-		-		-			-	
1	Kameng HEP	128.16	-	-	4.00	51.28	-0.12	-1.51	2.94	4.11	52.70
	Sub-Total	128.16	-	-	4.00	51.28	-0.12	-1.51	2.94	4.11	52.70

S.No	Source of Power (Station wise)	FY 2020-21									
		Units (MU)	Annual Fixed Charges		Annual Energy/ Variable charge		Annual Other Cost		Late payment Surcharge	Total cost	
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)		(Rs. Cr.)	(Rs. / kWh)
k	IPP/JV		-		-		-			-	
	HYDRO		-		-		-			-	
1	TALA	149.57	-	-	2.16	32.31	-	-	-	2.16	32.31
2	SRI NAGAR HEP	1,263.52	2.94	371.98	2.39	302.57	1.25	157.84	-	6.59	832.40
3	VISHNU PRAYAG	1,588.27	0.14	22.28	1.03	163.84	-0.03	-4.25	-	1.15	181.87
4	KARCHAM	858.75	2.14	183.90	1.34	115.14	0.76	65.32	29.21	4.58	393.56
5	TEESTA-III	880.09	3.73	327.89	2.17	190.75	0.36	31.72	60.77	6.94	611.12
	Sub-Total	4,740.19	1.91	906.05	1.70	804.61	0.53	250.62	89.98	4.33	2,051.25
	Thermal		-		-		-			-	
1	Meja Thermal Power Plant	3,137.99	3.00	941.29	2.50	785.98	0.02	5.14	-	5.52	1,732.41
2	LANCO	7,545.46	0.75	562.47	2.04	1,537.52	0.01	4.77	106.83	2.93	2,211.60
3	APCPL	235.69	1.27	29.94	3.33	78.42	1.21	28.55	-	5.81	136.92
4	BEPL BARKHERA	169.65	6.53	110.70	3.43	58.18	-4.85	-82.23	144.13	13.60	230.78
5	BEPL KHAMBAKHERA	172.27	6.49	111.87	3.43	59.10	-	-	-	9.92	170.97
6	BEPL KUNDRAKHI	226.79	4.91	111.37	3.15	71.55	-	-	-	8.07	182.92
7	BEPL MAQSOODAPUR	179.56	6.15	110.38	3.34	59.89	-	-	-	9.48	170.27
8	BEPL UTRAULA	239.19	4.79	114.55	3.34	79.88	-	-	-	8.13	194.43
9	KSK MAHANADI	5,191.52	2.87	1,489.20	2.73	1,416.48	-0.09	-49.06	201.87	5.89	3,058.49
10	LALITPUR	7,063.86	4.77	3,366.19	2.98	2,105.67	2.00	1,415.76	1,085.33	11.29	7,972.95
11	M.B.POWER	2,071.08	3.14	649.79	2.10	435.22	-0.02	-4.95	138.73	5.88	1,218.80
12	PRAYAGRAJ POWER	9,787.93	1.39	1,359.62	2.42	2,368.60	0.01	13.59	242.35	4.07	3,984.17
13	R.K.M.POWER	2,451.16	2.46	604.05	1.88	461.79	-0.03	-8.51	93.12	4.69	1,150.46
14	ROSA-1&2	6,303.17	1.85	1,163.64	2.57	1,619.47	0.56	352.86	-	4.98	3,135.97
15	SASAN	3,769.73	0.13	50.53	1.07	403.36	0.20	74.04	-	1.40	527.93
16	TRN ENERGY	1,621.64	1.77	287.41	1.51	245.29	-0.05	-7.48	54.88	3.58	580.11
17	NABINAGAR POWER PROJECT	389.97	3.42	133.51	2.10	81.79	-0.23	-8.98	-	5.29	206.32
	Sub-Total	50,556.66	2.21	11,196.53	2.35	11,868.21	0.34	1,733.51	2,067.24	5.31	26,865.49
B	Medium term Sources		-		-		-			-	

S.No	Source of Power (Station wise)	FY 2020-21									
		Units (MU)	Annual Fixed Charges		Annual Energy/ Variable charge		Annual Other Cost		Late payment Surcharge	Total cost	
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)		(Rs. Cr.)	(Rs. / kWh)
	Station/Source 1	-	-	-	-	-	-	-	-	-	-
	Station/Source 2	-	-	-	-	-	-	-	-	-	-
	Sub-Total	-	-	-	-	-	-	-	-	-	-
C	Short term Sources	-	-	-	-	-	-	-	-	-	-
	Station/Source 1	-	-	-	-	-	-	-	-	-	-
	Station/Source 2	-	-	-	-	-	-	-	-	-	-
	Sub-Total	-	-	-	-	-	-	-	-	-	-
D	Cogen/ Captive	-	-	-	-	-	-	-	-	-	-
1	Abhinav Steel (CPP)	-	-	-	-	-	-	-	-	-	-
2	Aditya birla camicals (Grasim Industries)	-	-	-	-	-	-	-	-	-	-
3	Akbarpur Chini Mills Ltd.,	30.35	-	-	2.92	8.87	-	-	-	2.92	8.87
4	Avadh sugar Energy Limited, Hargaon, Sitapur	45.39	-	-	2.57	11.66	0.39	1.78	-	2.96	13.44
5	Avadh sugar energy ltd. Sehora Bijnor	62.01	-	-	3.03	18.80	-0.44	-2.76	-	2.59	16.04
6	Bajaj Hindustan Ltd., Barkhera	12.79	-	-	2.60	3.32	-	-	-	2.60	3.32
7	Bajaj Hindustan Ltd., Bilai	28.52	-	-	2.97	8.46	-	-	-	2.97	8.46
8	Bajaj Hindustan Ltd., Budhana	14.26	-	-	2.92	4.16	-	-	-	2.92	4.16
9	Bajaj Hindustan Ltd., Gangnaqli	2.03	-	-	0.87	0.18	-	-	-	0.87	0.18
10	Bajaj Hindustan Ltd., Khambakhera	11.58	-	-	0.74	0.86	-	-	-	0.74	0.86
11	Bajaj Hindustan Ltd., Kinauni	30.85	-	-	2.93	9.04	-	-	-	2.93	9.04
12	Bajaj Hindustan Ltd., Kundrakhi	31.91	-	-	3.14	10.03	-	-	-	3.14	10.03
13	Bajaj Hindustan Ltd., Maqsoodapur	12.33	-	-	2.64	3.25	-	-	-	2.64	3.25
14	Bajaj Hindustan Ltd., Paliaklan	10.39	-	-	0.87	0.91	-	-	-	0.87	0.91
15	Bajaj Hindustan Ltd., Thanabhawn	34.07	-	-	2.98	10.14	-	-	-	2.98	10.14
16	Bajaj Hindustan Ltd., Utraula	23.02	-	-	3.47	8.00	-	-	-	3.47	8.00
17	Balrampur Chini Mills Ltd., Balrampur	65.53	-	-	3.17	20.76	0.06	0.39	-	3.23	21.15
18	Balrampur Chini Mills Ltd., Gonda (Babhnan)	31.46	-	-	1.20	3.76	1.97	6.21	-	3.17	9.97
19	Continental Carbon India Ltd.	19.10	-	-	2.71	5.17	0.78	1.49	-	3.49	6.66
20	Dalmia Chini Mills Ltd., Jawaharapur	80.61	-	-	3.02	24.32	-0.01	-0.06	-	3.01	24.26

S.No	Source of Power (Station wise)	FY 2020-21									
		Units (MU)	Annual Fixed Charges		Annual Energy/ Variable charge		Annual Other Cost		Late payment Surcharge	Total cost	
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)		(Rs. Cr.)	(Rs. / kWh)
21	Dalmia Chini Mills Ltd., Nigohi	64.32	-	-	2.98	19.15	-	-	-	2.98	19.15
22	Dalmia Chini Mills Ltd., Ramgarh	47.48	-	-	2.99	14.20	-	-	-	2.99	14.20
23	Daurala Sugar Works(DCM)	69.58	-	-	2.98	20.72	-	-	-	2.98	20.72
24	DCM Sriram Consdolidated Ltd, Loni,Hardoi	49.14	-	-	3.53	17.36	-0.47	-2.32	-	3.06	15.04
25	DCM Sriram Consolidated Ltd, Hariawan,Hardoi	128.33	-	-	1.28	16.45	2.52	32.38	-	3.81	48.83
26	DCM Sriram Consolidated Ltd., Lakhimpur Ajbapur	147.30	-	-	2.66	39.17	0.78	11.48	-	3.44	50.65
27	Dhampur Sugar Mills Ltd., Bareilly,Meerganj	17.53	-	-	2.81	4.93	-	-	-	2.81	4.93
28	Dhampur Sugar Mills Ltd., Bijnor	114.23	-	-	3.03	34.59	0.02	0.26	-	3.05	34.85
29	Dhampur Sugar Mills Ltd., Muzaffarnagar,Mansoorpur	79.84	-	-	2.98	23.78	-	-	-	2.98	23.78
30	Dhampur Sugar Mills Ltd., Rajpura,Sambhal	61.17	-	-	3.85	23.58	-	-	-	3.85	23.58
31	Dhampur Sugar Mills Ltd., Sambhal,Asmoli,Dhampur	70.93	-	-	2.98	21.11	-	-	-	2.98	21.11
32	Dwarikesh Sugar Ind. Ltd., Dhampur Bijnor	62.45	-	-	3.06	19.08	-	-	-	3.06	19.08
33	Dwarikesh Sugar Ind. Ltd., Faridpur Bareilly	79.19	-	-	3.03	24.02	-	-	-	3.03	24.02
34	Dwarikesh Sugar Ind. Ltd., Nagina Bijnor	29.54	-	-	3.04	8.98	-	-	-	3.04	8.98
35	Govind Sugar	80.85	-	-	3.88	31.37	-	-	-	3.88	31.37
36	Gularia Chini Mills Ltd.,	62.14	-	-	3.48	21.61	-0.52	-3.25	-	2.95	18.36
37	Haidergarh Chini Mills Ltd.,	30.26	-	-	2.91	8.81	-	-	-	2.91	8.81
38	Hindalco Industries Ltd. Renukoot	-	-	-	-	-	-	5.28	-	-	5.28
39	India Glycols	4.96	-	-	5.72	2.84	-0.01	-0.01	-	5.71	2.83
40	K.M. Sugar Ltd.,	53.25	-	-	3.02	16.10	-	-	-	3.02	16.10
41	Kesar Enterprises Ltd.	106.63	-	-	3.41	36.31	0.36	3.79	-	3.76	40.10
42	Kisan Sahkari Chini Mill Azamgarh	15.68	-	-	3.93	6.16	0.14	0.22	-	4.07	6.38
43	Kumbhi Sugar Mills Ltd.,	62.92	-	-	3.33	20.93	-	-	-	3.33	20.93
44	L.H. Suagar Factories Ltd.,	87.95	-	-	2.86	25.11	0.01	0.09	-	2.87	25.20
45	Mankapur Chini Mills Ltd.,	84.75	-	-	3.16	26.76	0.03	0.22	-	3.18	26.99
46	Mawana Sugar Ltd., Meerut	34.30	-	-	3.02	10.37	-	-	-	3.02	10.37

S.No	Source of Power (Station wise)	FY 2020-21									
		Units (MU)	Annual Fixed Charges		Annual Energy/ Variable charge		Annual Other Cost		Late payment Surcharge	Total cost	
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)		(Rs. Cr.)	(Rs. / kWh)
47	Mawana Sugar Ltd., Naglamal	37.98	-	-	2.99	11.35	-	-	-	2.99	11.35
48	Mawana Sugar Ltd., Titawi	60.94	-	-	3.01	18.35	-	-	-	3.01	18.35
49	New India Sugar Mills., Now, Avadh Sugar Kushinagar	21.22	-	-	2.98	6.33	1.18	2.50	-	4.16	8.84
50	Novel Sugar	5.15	-	-	2.55	1.31	4.25	2.19	-	6.80	3.50
51	Oswal Overseas	4.67	-	-	4.26	1.99	0.00	0.00	-	4.26	1.99
52	Parle Biscuits Pvt. Ltd. (Sugar Dn.),	26.44	-	-	2.86	7.56	-1.97	-5.22	-	0.89	2.34
53	Ramala Sahkari Chini Mills (Baghpat) UP	46.53	-	-	4.39	20.43	1.18	5.51	-	5.57	25.93
54	Rana Sugar Miis Ltd. Karimganj Rampur	40.25	-	-	3.25	13.10	-	-	-	3.25	13.10
55	Rana Sugar Miis Ltd. Belwara, Moradbad	13.09	-	-	2.88	3.78	-	-	-	2.88	3.78
56	Rana Sugar Miis Ltd. Bilari, Moradabd	62.17	-	-	4.05	25.21	0.53	3.31	-	4.59	28.52
57	Rauzagaon Chini Mills Ltd.,	57.96	-	-	3.00	17.40	-	-	-	3.00	17.40
58	SBEC Bioenergy Ltd.	35.20	-	-	2.96	10.42	-	-	-	2.96	10.42
59	Simbholi Sugar Ltd., Bahraich	19.73	-	-	3.38	6.67	-	-	-	3.38	6.67
60	Simbholi Sugar Ltd., Hapur	104.78	-	-	3.51	36.79	-	-	-	3.51	36.79
61	SKI Hi Tech Carbon (Now Birla Carbon India Pvt. Ltd.)	33.32	-	-	3.98	13.25	-0.04	-0.14	-	3.93	13.11
62	Sukhbir Agro Energy Ltd.	81.96	-	-	6.40	52.44	0.07	0.60	-	6.47	53.03
63	Superior Food Grain ,Shamli	92.99	-	-	4.05	37.68	-	-	-	4.05	37.68
64	The Seksaria Biswan sugar	81.43	-	-	4.29	34.94	-	-	-	4.29	34.94
65	Tikaula Sugar Ltd.,	59.45	-	-	3.50	20.82	0.00	0.02	-	3.50	20.84
66	Triveni Engg. & Industries Ltd., Milak Narayanpur	13.15	-	-	2.95	3.87	-	-	-	2.95	3.87
67	Triveni Engg. & Industries Ltd., Chandpur	9.64	-	-	2.49	2.40	0.48	0.46	-	2.97	2.86
68	Triveni Engg. & Industries Ltd., Deoband Saharanpur	57.19	-	-	2.54	14.51	0.46	2.64	-	3.00	17.15
69	Triveni Engg. & Industries Ltd., Khatuali Muzaffarnagar	129.88	-	-	2.90	37.73	-	-	-	2.90	37.73
70	Triveni Engg. & Industries Ltd., Sabitgarh	18.78	-	-	3.77	7.07	-0.00	-0.00	-	3.76	7.07

S.No	Source of Power (Station wise)	FY 2020-21									
		Units (MU)	Annual Fixed Charges		Annual Energy/ Variable charge		Annual Other Cost		Late payment Surcharge	Total cost	
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)		(Rs. Cr.)	(Rs. / kWh)
71	U.P State Sugar & Cane Development Corp. Ltd., Moinuddinpur, Meerut	33.32	-	-	4.45	14.83	-	-	-	4.45	14.83
72	U.P State Sugar & Cane Development Corp. Ltd., Munderva, Basti	37.08	-	-	4.15	15.38	0.13	0.47	-	4.28	15.85
73	U.P State Sugar & Cane Development Corp. Ltd., Pipraich, Gorakhpur	15.45	-	-	4.58	7.08	-	-	-	4.58	7.08
74	Usher Eco Power	-	-	-	-	-	-	-	-	-	-
75	Uttam Sugar Mills, Ltd. Barkatpur, Bijnor	51.92	-	-	2.99	15.50	-	-	-	2.99	15.50
76	Uttam Sugar Mills, Ltd. Khaikheri Muzaffarnagar	30.15	-	-	2.83	8.52	0.14	0.42	-	2.96	8.94
77	Uttam Sugar Mills, Ltd. Shermau Saharanpur	41.83	-	-	2.78	11.63	0.00	0.00	-	2.78	11.63
78	Wave Ind. & Engg. Ltd.,	34.58	-	-	4.22	14.59	-1.93	-6.69	-	2.28	7.90
79	Yedu Sugars Ltd.,	13.93	-	-	3.20	4.46	-0.00	-0.00	-	3.20	4.46
	Sub-Total	3,563.10	-	-	3.21	1,142.56	0.17	61.28	-	3.38	1,203.84
E	Bilateral & Others (Power purchased through Trading)		-	-	-	-	-	-	-	-	-
	Power Purchase From Exchange	-	-	-	-	-	-	-	-	-	-
	IEX (Sale)/PXIL (Sale)	4,677.90	-	-	3.01	1,408.55	-	-	-	3.01	1,408.55
	IEX (Purchase)/PXIL (Purchase)	1,490.08	-	-	3.76	560.43	0.00	0.00	-	3.76	560.43
	Purchase From Open Access (OA)	1,556.03	-	-	3.53	548.62	0.42	64.79	-	3.94	613.41
	NHPC	142.93	-	-	3.72	53.12	-	-	-	3.72	53.12
	TATA / MPL / PSPCL	207.82	-	-	3.33	69.13	-0.04	-0.89	-	3.28	68.24
	NVVN	410.79	-	-	3.53	144.84	-	-	-	3.53	144.84
	PTC	794.49	-	-	3.54	281.53	0.83	65.68	-	4.37	347.21
	Sub-Total	(1,631.79)	-	-	1.84	-299.49	-0.40	64.79	-	1.44	-234.70
E 1	Unscheduled Interchange		-	-	-	-	-	-	-	-	-
i	UI (Underdrawl)	(784.43)	-	-	1.39	-109.41	-	-	-	1.39	-109.41
ii	UI (Overdrawl)	559.20	-	-	1.24	69.52	-	-	-	1.24	69.52
	Sub-Total	(225.23)	-	-	1.77	-39.89	-	-	-	1.77	-39.89

S.No	Source of Power (Station wise)	FY 2020-21									
		Units (MU)	Annual Fixed Charges		Annual Energy/ Variable charge		Annual Other Cost		Late payment Surcharge	Total cost	
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)		(Rs. Cr.)	(Rs. / kWh)
F	Solar (Existing)		-		-		-			-	
1	Adani Green Energy	97.09	-	-	5.07	49.23	-0.05	-0.49	-	5.02	48.74
2	Adani Solar Energy Four Pvt. Ltd.,	43.33	-	-	3.03	13.11	-0.02	-0.10	-	3.00	13.01
3	Adani Solar Energy, Chitrakoot (50 Mw)	7.75	-	-	2.30	1.79	-0.02	-0.02	-	2.28	1.77
4	Agrawal Solar Power Pvt. Ltd.	8.28	-	-	7.02	5.81	-0.06	-0.05	-	6.96	5.76
5	Aryavaan Renewable Energy Pvt. Ltd.	6.89	-	-	7.02	4.84	-0.07	-0.04	-	6.95	4.79
6	Avaada Non-Conventional UP Project. Pvt. Ltd. Noida	4.36	-	-	0.53	0.23	1.89	0.83	-	2.42	1.06
7	Azure Surya Private Limited.	17.63	-	-	8.99	15.85	-0.06	-0.11	-	8.93	15.74
8	Dante Energy Private Limited.	2.41	-	-	14.95	3.60	-0.30	-0.07	-	14.65	3.52
9	Dhruv Milkose Private Limited.	1.05	-	-	16.03	1.69	1.45	0.15	-	17.49	1.84
10	Essel Urja Private Limited	62.88	-	-	9.27	58.29	-0.32	-2.01	-	8.95	56.28
11	Green Urja Pvt. Ltd	49.55	-	-	9.24	45.78	-0.07	-0.35	-	9.17	45.43
12	Jakson Power Private Limited	17.01	-	-	8.44	14.36	-0.07	-0.12	-	8.37	14.24
13	K.M. Energy Pvt. Ltd	8.89	-	-	9.25	8.22	-0.07	-0.07	-	9.18	8.16
14	Lohia Developers (India) Pvt. Ltd.	8.36	-	-	7.02	5.87	-0.05	-0.05	-	6.97	5.83
15	Nirosha Power Pvt. Ltd	53.24	-	-	8.93	47.54	-0.07	-0.38	-	8.86	47.16
16	NTPC Auraiya Solar	67.85	-	-	0.18	1.21	2.93	19.87	-	3.11	21.08
17	PINNACLE RENEWABLE ENERGY (SITAPUR)	6.76	-	-	2.93	1.98	-0.21	-0.14	-	2.73	1.84
18	Priapus Infrastructure Limited.	2.24	-	-	17.88	4.00	-0.39	-0.09	-	17.49	3.91
19	PSPN Synergy Pvt. Ltd.	26.51	-	-	7.02	18.61	-0.06	-0.16	-	6.96	18.45
20	Refex Energy (Rajasthan) Pvt. Ltd	16.77	-	-	9.24	15.49	-0.06	-0.11	-	9.18	15.39
21	Sahshradhara Energy Pvt. Ltd. Kisni Mainpuri	7.54	-	-	5.07	3.82	-0.05	-0.04	-	5.02	3.78
22	Salasar Green Energy Pvt. Ltd.	9.08	-	-	7.02	6.38	-0.06	-0.06	-	6.96	6.32
23	Samavist Energy Solutions Pvt. Ltd	17.06	-	-	9.33	15.92	-0.07	-0.11	-	9.26	15.81
24	Solar Energy Corporation of India Ltd. (SECI)	2,813.03	-	-	2.98	839.68	-0.01	-1.85	-	2.98	837.83
25	Spinel Energy Infrastructure Limited.	34.41	-	-	7.54	25.94	-0.06	-0.22	-	7.48	25.72
26	Sukhbir Agro (1) Lalitpur UP. (10 MW)	17.49	-	-	7.02	12.28	-	-	-	7.02	12.28

S.No	Source of Power (Station wise)	FY 2020-21									
		Units (MU)	Annual Fixed Charges		Annual Energy/ Variable charge		Annual Other Cost		Late payment Surcharge	Total cost	
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)		(Rs. Cr.)	(Rs. / kWh)
27	Sukhbir Agro (2) Lalitpur UP. (20 MW)	34.96	-	-	7.02	24.54	-	-	-	7.02	24.54
28	Sukhbir Agro (3) Mahoba UP. (20 MW)	34.62	-	-	7.02	24.31	-0.16	-0.55	-	6.86	23.75
29	Sukhbir Agro Energy Ltd. (50MW) Chitrakoot (U.P)	20.87	-	-	3.20	6.68	-0.03	-0.06	-	3.17	6.62
30	SUN N Wind Infra Energy Pvt. Ltd.	17.60	-	-	9.27	16.31	-0.07	-0.13	-	9.20	16.19
31	TA GREENTECH PVT. LTD.	16.55	-	-	5.07	8.39	-0.05	-0.08	-	5.02	8.31
32	Taletutayi Solar Projects Five Pvt. Ltd. Distt. Budaun, U.P	7.59	-	-	3.21	2.44	-1.82	-1.38	-	1.39	1.05
33	Technical Associate Limited.	2.70	-	-	17.91	4.83	-0.34	-0.09	-	17.57	4.74
34	TN Urja Pvt. Ltd	71.61	-	-	7.02	50.27	-0.05	-0.37	-	6.97	49.90
35	Universal Saur Urja Private Limited.	52.45	-	-	9.33	48.94	-0.08	-0.41	-	9.25	48.52
36	UP NEW & RENEWABLE ENERGY GOMTI NGAR LUCKNOW	39.82	-	-	5.15	20.52	0.02	0.10	-	5.18	20.62
	Sub-Total	3,706.22	-	-	3.85	1,428.74	0.03	11.23	-	3.89	1,439.98
G	Non-Solar (Renewable)		-	-	-		-			-	
I	WIND		-	-	-		-			-	
1	OSTRO KUTCH POWER (PTC)	276.33	-	-	3.53	97.54	0.00	0.01	-	3.53	97.54
2	GREEN INFRA WIND POWER (PTC)	294.87	-	-	3.53	104.07	0.00	0.02	-	3.53	104.09
3	MYTRAH VAYU (PTC)	208.54	-	-	3.53	73.60	0.00	0.01	-	3.53	73.61
4	RENEW POWER (SECI)	224.74	-	-	2.71	60.90	0.00	0.00	-	2.71	60.91
5	ADANI GREEN ENERGY LTD., MP	115.19	-	-	3.53	40.66	0.00	0.00	-	3.53	40.66
6	WIND ONE RENERGY Pvt. Ltd.	83.04	-	-	3.53	29.31	0.00	0.00	-	3.53	29.31
7	WIND TWO RENERGY Pvt. Ltd.	93.38	-	-	3.53	32.96	0.00	0.00	-	3.53	32.96
8	VIVID SOLAIRE ENERGY PVT. LTD. (SECI)	55.82	-	-	1.96	10.93	0.00	0.01	-	1.96	10.94
9	Spring Renewable Energy Pvt. Ltd. (SREPL)	0.79	-	-	1.95	0.15	-	-	-	1.95	0.15
10	Adani Wind Energy Three, Kutchh	6.76	-	-	2.73	1.85	-	-	-	2.73	1.85
H1	NVVN Thermal	772.88	-	-	3.24	250.64	-0.04	-3.00	59.67	3.98	307.31
H2	NVVNL Solar	342.70	-	-	6.24	213.72	0.49	16.63	-	6.72	230.34
I	Reactive Energy Charges	-	-	-	-	-	-	6.88	-	-	6.88

S.No	Source of Power (Station wise)	FY 2020-21										
		Units (MU)	Annual Fixed Charges		Annual Energy/ Variable charge		Annual Other Cost		Late payment Surcharge	Total cost		
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)		(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)
J	UI Charges	-	-	-	-	-	-	-	-	-	-	-
K	REC	-	-	-	-	-	-	-	-	-	-	-
L	Banking	251.25	-	-	-	-	1.33	33.30	0.08	1.33	33.38	
	RVUNL	220.90	-	-	-	-	-0.09	-2.08	-	-0.09	-2.08	
	MPPMCL	30.35	-	-	-	-	11.65	35.38	0.08	11.68	35.46	
	Sub-total	1,366.84	-	-	3.40	464.36	0.39	53.80	59.75	4.23	577.90	
	Transmission Charges		-	-	-	-	-	-	-	-	-	
M	PGCIL Charges	-	-	-	-	-	-	3,737.28	12.69	-	3,749.98	
N	STU Charges	-	-	-	-	-	-	-	-	-	-	
O	UPPTCL Charges	-	-	-	-	-	-	-	-	-	-	
i	WUPPTCL Charges	-	-	-	-	-	-	875.82	-	-	875.82	
ii	SEUPPTCL Charges	-	-	-	-	-	-	301.90	-	-	301.90	
	Sub-total	-	-	-	-	-	-	4,915.00	12.69	-	4,927.70	
iii	Transmission Charges for Competitive Bidding Stations		-	-	-	-	-	-	-	-	-	
a.	KSK Mahanadi	-	-	-	-	-	-	486.63	-	-	486.63	
b	MB Power	-	-	-	-	-	-	120.56	-	-	120.56	
c	TRN	-	-	-	-	-	-	110.53	-	-	110.53	
d	RKM Power	-	-	-	-	-	-	82.59	-	-	82.59	
	Sub-total	-	-	-	-	-	-	800.30	-	-	800.30	
P	RRAS	-	-	-	-	-	-	-11.66	-	-	-11.66	
Grand Total		120,580.34	1.61	19,418.92	2.37	28,617.47	0.65	7,850.65	4,095.97	4.97	59,982.995	

2.4.2. The petitioner requests the Hon'ble commission to kindly approve the power purchase cost and quantum as shown in the above table.

- 2.4.3. The Petitioner has claimed the power purchase cost for FY 2020-21 based on actual payable as per the books of account for FY 2020-21. The allowable power purchase quantum for FY 2020-21 is shown in the table below:

Table 2-6 Power Purchase Cost for FY 2020-21

Particulars	Approved in T.O. dt. 11.11.2020	Claimed
Allowable Power Purchase (MU)	21,402.32	23,521.21
Power Purchase Cost (Rs. Cr.)	11,508.91	12,878.18

- 2.4.4. The Petitioner requests the Hon'ble Commission to allow the Power Purchase quantum and power purchase cost for FY 2020-21 as claimed in the above Table.

2.5. Intra-State Transmission Charges

- 2.5.1. The actual Transmission charges (including SLDC charges) is shown in the Table below:

Table 2-7 Intra-State Transmission Charges for FY 2020-21

Particulars	Unit	Approved in T.O. dt. 11.11.2020	Claimed
Units Wheeled (Energy Input into Transmission-Distribution Interface)	MU	21,402	23,521
Transmission Charges	Rs Crore	508.95	643.11

- 2.5.2. It is submitted that Transmission Charges are fixed in nature and depend upon the ARR approved by the Hon'ble Commission for UPPTCL. In all the past True-up's (prior to FY 2018-19) the Hon'ble Commission has been approving the Intra-State Transmission Charges for the Petitioner based on the actual amount booked in the Audited Balance Sheet for the respective year. The same is evident from the UPERC Tariff Order dated 03.09.2019 (i.e., True-up of FY 2017 – 18), abstract of the same is reproduced below:

"4.4.3 Accordingly, the Table below provides the details of transmission charges as approved in Tariff Order for FY 2017-18, Audited accounts and as trued Up by the Commission:

Particulars	Approved in MYT order			Claimed			Approved upon Truing Up		
	Units Wheeled (MU)	Transmission Charges (Rs./kWh)	Transmission Charges (Rs. Cr.)	Units Wheeled (MU)	Transmission Charges (Rs./kWh)	Transmission Charges (Rs. Cr.)	Units Wheeled (MU)	Transmission Charges (Rs./kWh)	Transmission Charges (Rs. Cr.)
DVVNL	24014.62	0.23	559.51	23440.25	0.19	488.48	23439.98	0.19	488.47
MVVNL	22819.62	0.23	531.67	21038.26	0.19	388.28	21038.26	0.19	388.28
PVVNL	33504.20	0.23	780.60	34438.67	0.18	610.28	34438.67	0.18	610.28
PuVVNL	28994.21	0.23	675.53	25860.66	0.19	482.50	25860.96	0.19	482.51
KESCo	4442.74	0.23	103.51	3677.86	0.18	64.56	3677.92	0.18	64.56
Total	113775.4	0.23	2650.82	108455.69	0.18	1994.10	108455.79	0.18	1994.10

- 2.5.3. In view of the above, it is evident that the Hon'ble Commission in the earlier Tariff Order dated 03.09.2019 itself allowed the actual transmission charges as incurred by the Discoms.

However, in the True-up Order for FY 2018-19 and FY 2019-20 the Hon'ble Commission disallowance by ignoring the amount booked in Balance Sheet is contrary to the practice/approach followed by the Hon'ble Commission in the past. Such approach followed by the Hon'ble Commission evinces lack of regulatory certainty.

2.5.4. Hence the disallowance towards Transmission Charges in the True-up Orders by the Hon'ble Commission is contrary to the tariff principles envisaged under Section 61 of the Act, which mandates the Commission to ensure that: -

(a) Recovery of the cost of electricity is done in a reasonable manner; and

(b) Tariff determined is a reflection of the actual cost of supply

2.5.5. The Petitioner requests Hon'ble Commission to allow transmission charges for FY 2020-21 as claimed in the above table based on Audited Accounts for FY 2020-21.

2.6. Operation and Maintenance Expenses

2.6.1. The Operation & Maintenance (O&M) Expenses comprises of Employee Expenses, Repair & Maintenance (R&M) Expenses and Administrative and General (A&G) Expenses.

2.6.2. Regulation 45 of MYT Regulations, 2019, stipulates the detailed methodology for determination of Operation & Maintenance (O&M) Expenses for the Control Period from FY 2020-21 to FY 2024-25.

The detailed methodology as stated in Regulation 45 is reproduced as under:

Quote

"45 Operation and Maintenance Expenses

a) The Operation and Maintenance expenses for the Distribution Business shall be computed as stipulated in with these Regulations.

b) The Operation and Maintenance expenses shall be derived on the basis of the average of the Trued-Up values (without efficiency gain / loss) for the last five (5) financial years ending March 31, 2019 subject to prudence check by the Commission. However, if Trued-Up values (without efficiency gain / loss) are not available for FY 2018-19, then last five (5) available Trued-Up values (without efficiency gain / loss) will be considered and subsequently when the same are available the base year value (i.e. FY 2019-20) will be recomputed

c) The average of such operation and maintenance expenses shall be considered as Operation and Maintenance expenses for the middle year and shall be escalated years-on-year with the escalation factor considering CPI and WPI of respective years in the ratio of 60:40, for subsequent years up to FY 2019-20.

d) The One-time expenses such as expense due to change in accounting policy, arrears paid due to Pay Commissions, etc., and the expenses beyond the control of the Distribution Licensee such as dearness allowance, terminal benefits, etc., in Employee cost, shall be allowed by the Commission over and above normative Operation & Maintenance Expenses after prudence check.

e) At the time of Truing-up of the O&M expenses, the actual point to point inflation over Wholesale Price Index numbers as per Office of Economic Advisor of Government of India and the actual Consumer Price Index for Industrial Workers (all India) as per Labour Bureau, Government of India, in the concerned year shall be considered.

45.1 Employee Cost

Employee cost shall be computed as per the following formula escalated by consumer price index (CPI), adjusted by provisions for expenses beyond the control of the Licensee and one-time expected expenses, such as recovery / adjustment of terminal benefits, implications of Pay Commission, arrears, Interim Relief, etc.:

$$EMP_n = EMP_{n-1} \times (1 + \text{CPI inflation})$$

Where:

EMP_n : Employee expense for the n th year;

EMP_{n-1} : Employee expense for the $(n-1)$ th year;

CPI inflation is the average of Consumer Price Index (CPI) for immediately preceding three Financial Years.

45.2 Repairs and Maintenance Expense

Repairs and Maintenance expense shall be calculated by following formula:

$$R\&M_n = R\&M_{n-1} (1 + \text{WPI inflation})$$

Where:

$R\&M_n$: Repairs & Maintenance expense for the n th year;

$R\&M_{n-1}$: Repairs & Maintenance expense for the $(n-1)$ th year;

WPI inflation is the average of Wholesale Price Index (WPI) for immediately preceding three Financial Years.

45.3 Administrative and General Expense

A&G expense shall be computed as per the following formula escalated by wholesale price index (WPI) and adjusted by provisions for confirmed initiatives (IT etc. initiatives as proposed by the Distribution Licensee and validated by the Commission) or other expected one-time expenses:

$$A\&G_n = A\&G_{n-1} (1 + \text{WPI inflation})$$

Where:

$A\&G_n$: A&G expense for the n th year;

$A\&G_{n-1}$: A&G expense for the $(n-1)$ th year;

WPI inflation is the average of Wholesale Price Index (WPI) for immediately preceding three Financial Years: Provided that Interest and Finance charges such as Credit Rating charges, collection facilitation charges, financing cost of Delayed Payment Surcharge and other finance charges shall be a part of A&G expenses.

Illustration: For FY 2020-21, (n-1) th year will be FY 2019-20 which is also the base year.

Unquote

2.6.3. It is submitted that The Hon'ble Commission has disallowed the O&M expenses claimed by Petitioner in tariff order dated 11.11.2020 for ARR of FY 2020-21 owing to the following:

-

(a) The Hon'ble Commission has arrived at the mid-year (FY 2016-17) value of each component of O&M expenses based on the average of last 5 years true-up values of FY 2014-15 to FY 2018-19. The mid-year value of each component of O&M expenses has been escalated year on year with the escalation factor considering Consumer Price Index (CPI) and Whole-sale Price Index (WPI) of respective years in the ratio 60:40, for subsequent years up to FY 2019-20.

(b) Accordingly, the Hon'ble Commission has computed the O&M expenses of the base year which shall be escalated at Inflation/Escalation rate notified by Labour Bureau, Govt. of India (http://labourbureau.gov.in/LBO_indexes.htm) and Economic Advisor Govt. of India (<https://eaindustry.nic.in/>) respectively for different years.

Accordingly, the Hon'ble Commission has computed the average WPI and CPI inflation of the last 3 years (average) at 2.96% and 5.35%, respectively.

(c) In terms of this methodology: -

(i) Employee Expenses for FY 2020-21 have been computed by escalating the base year (FY 2019-20) employee expenses by average CPI inflation of last 3 years.

(ii) The A&G Expenses (including Finance Charges) and R&M Expenses for FY 2020-21 have been computed by escalating the base year (FY 2019-20) by average WPI inflation of last 3 years.

2.6.4. At the outset, it is submitted that O&M expenses comprise of employee related costs, A&G expenses and R&M expenditure. Further, Petitioner intend to recover their legitimate actual O&M Expenses and do not intend to get any additional benefit out of the same.

2.6.5. It is submitted that the O&M expenses being allowed by the Hon'ble Commission are insufficient to cover the actual cost/impact of O&M expenses likely to be incurred by the Petitioner. As such, the methodology adopted by the Hon'ble Commission will lead

considerable loss to the Petitioner whose financial condition is already precarious and stressed.

- 2.6.6. O&M expenses are computed on normative basis in terms of the norms prescribed under the Tariff Regulations. It is submitted that the methodology prescribed by The Hon'ble Commission for computation of normative O&M expenses is significantly different in MYT Regulations, 2019 as compared to the methodology provided under the erstwhile regime i.e., MYT Regulations, 2014.
- 2.6.7. It is submitted that under the MYT Regulations 2014 computation of O&M expenses was based on the trajectory of norms derived on average of past five years audited figures. It is noteworthy that the draft MYT Regulations, 2019 issued by The Hon'ble Commission also had similar provisions for computation of O&M expenses. However, in the final MYT Regulations 2019, the Hon'ble Commission has completely changed the methodology and adopted a completely new methodology for computing the O&M expenses, which is based on escalation factor considering CPI and WPI based on the average of last 5 years trued-up values (that too without consideration of efficiency gain/loss on O&M expenses). Such a change was effected without giving any opportunity to the stakeholders including the Petitioner to submit their suggestions/objections on the same.
- 2.6.8. This new approach adopted by the Hon'ble Commission will result in substantial losses to the Petitioner as it is likely that the Petitioner will not be able to meet its regular expenses including employee costs, R&M and A&G expenses.
- 2.6.9. It is pertinent to highlight that owing to the implementation of the Government's Saubhagya Scheme in the last three financial years (i.e., FY 2017-18 onwards), Petitioner has added a significant consumer base leading to an increase in load, extension of LT Network and backbone distribution infrastructure. Accordingly, there is resultant significant increase in the O&M expenses
- 2.6.10. As deliberated above, computation of O&M expenses as per the methodology provided under the MYT Regulation 2019 will cause severe financial hardship to the Petitioner.
- 2.6.11. Petitioner submits that since Hon'ble Commission has already trued up the O&M expenses for FY 2019-20, the same shall be considered as the base value rather than deriving the base value for FY 2019-20 as stipulated in Regulation 45 of MYT Regulations, 2019. In this context, it is submitted that, the Hon'ble Commission while truing-up for FY2019-20 has Trued-up O&M expenses for the year as under:

FY 19-20	DVVNL	MVVNL	PVVNL	PUVVNL	KESCO	Total (in Crs.)
Trued-up O&M expenses	1193.06	1433.57	1360.66	1804.31	246.43	6038.03

- 2.6.12. However, Hon'ble Commission while computing the O&M expenses in the Tariff Order dated 29.07.2021 has computed the base year value (FY 2019-20) which is less than the approved O&M Expenses and the same is shown in the table below.

FY 19-20	DVVNL	MVVNL	PVVNL	PUVVNL	KESCO	Total (in Crs.)
Computed O&M expenses	1038.11	1256.36	1117.22	1528.79	239.36	5179.84

- 2.6.13. It can be perceived from the above two tables that the Hon'ble Commission has itself estimated two different O&M Expenses for the same year. Thus, the petitioner has considered the Trued up value for FY 2019-20 as a base value for the escalation of normative O&M Expenses for FY 2020-21 as per the MYT Regulations, 2019.
- 2.6.14. The Petitioner request the Hon'ble Commission to allow the O&M Expenses in line with the methodology proposed in the instant petition which is based on the Trued up O&M Expenses for FY 2019-20 and considering the applicable CPI escalation factors (for Employee Expenses) and WPI escalation factors (R&M Expenses and A&G Expenses) for FY 2020-21, FY 2021-22 and FY 2022-23.
- 2.6.15. It is further noted that, the Hon'ble Commission has also issued the Uttar Pradesh Electricity Regulatory Commission (Standard of Performance) Regulation, 2019 dated 16.12.2019 wherein stringent norms for Standards of Performance are to be followed by the Distribution Licensee for providing various services to the consumers in a time bound manner failing which the Distribution Licensee is required to pay compensation.
- 2.6.16. Therefore, while the Hon'ble Commission has laid down stringent Standards of Performance which can only be complied with by enhancing the office and field workforce, implementation of various IT & Automation systems etc. entailing more expenditure on employees, R&M and A&G expenses the prescribed norms for approval of O&M Expenses are such that even the existing manpower and facilities cannot be retained.
- 2.6.17. It is, therefore, submitted that these expenses are over and above the normative expense trajectory followed by the Hon'ble Commission. It is prayed before the Hon'ble Commission that a separate provision maybe allowed in order to reduce the hardship on account of the O&M expenses.

WPI and CPI Escalation Rates

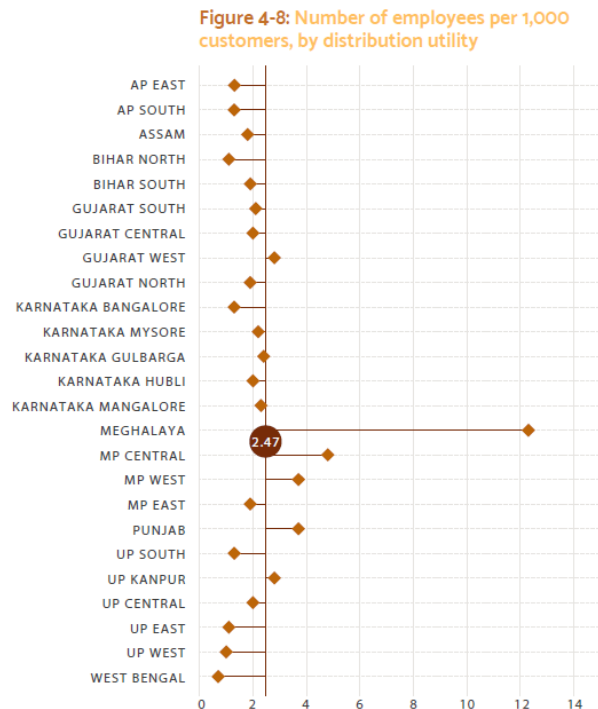
- 2.6.18. The Petitioner has considered the CPI and WPI inflation index as per Inflation/Escalation rate notified by Labour Bureau, Govt. of India (http://labourbureau.gov.in/LBO_indexes.htm) and Economic Advisor Govt. of India (<https://eaindustry.nic.in/>) respectively. The same is also mentioned below.

Table 2-8 Inflation Indices

FY	Index		Inflation rate	
	WPI	CPI	WPI	CPI
FY 2017-18	114.88	284.42	2.92%	3.08%
FY 2018-19	119.79	299.92	4.28%	5.45%
FY 2019-20	121.83	322.50	1.70%	7.53%
FY 2020-21	123.38	338.71	1.27%	5.03%
FY 2021-22	137.69	353.40	11.60%	4.34%

Employee Expenses

- 2.6.19. The Petitioner has considered the trued-up value for FY 2019-20 as approved by the Commission in Tariff order for FY 2021-22. Thereafter, the petitioner has considered same methodology and norms for the Truing-up of Employee Expenses for FY 2020-21 on the normative basis in terms of the norms prescribed under MYT Regulations, 2019.
- 2.6.20. Petitioner further submits, as per the report “Benchmarking Distribution Utilities” dated October 2020 published by Niti Aayog, the national average of employees per 1000 consumers engaged in distribution utilities comes out to be 2.47. Whereas for the Uttar Pradesh Discoms, this ratio is less than 1 for PVVNL and PuVVNL, approx. 1 for DVVNL, and around 2 for KESCO and MVVNL. The same can be seen from the graph represented below.



- 2.6.21. It is important to note that the employees available with UPPCL and its Discom are less than the national average.
- 2.6.22. Further, it is imperative to highlight that the Petitioner is striving to improve its performance and focusing heavily on billing and collection. In order to improve its performance, the Petitioner has initiated the hiring of contractual person for the activities related to metering, billing and collection. Because of this the Administrative and General Expenses (A&G) expenses increased substantially from FY 2017-18. Such expenses are recorded under the head of “Payment to Contractual Person”, “Incidental Stores Expenses (Expenses Incurred on revenue realization)” and “Expenses on Spot Billing Centre” under A&G Expenses. It is noteworthy to mention that expense recorded under these heads were very less prior to FY 2018.
- 2.6.23. However, such expenses incurred has been fruitful for the Petitioner since the overall performance of Petitioner and consumer serviceability has improved over the years. The same can be correlated with Ninth Annual Integrated Rating for State Power Distribution Utilities published by PFC dated July,2021. Year on Year improvement in the performance of the petitioner is shown below.

Table 2-9 Annual Integrated Rating by PFC

MVVNL	FY 2016	FY 2017	FY 2018	July 2021
Rating	C	C	C+	B

- 2.6.24. It is pertinent to highlight that Hon'ble Commission as per provision (b) of Regulation 45 of MYT Tariff Regulations, 2019 depicts the methodology to derive O&M expenses which is based on the average of the Trued-up values for last five (5) financial years ending March 31,2019.
- 2.6.25. Further, it is important to highlight that the Petitioner started incurring high A&G expenses from FY 2018 as it started hiring of contractual person. Hence, the methodology adopted by the Hon'ble Commission suppresses the base year value as the actual / trued up expenses were very less prior to FY 2018.
- 2.6.26. Since, the Hon'ble Commission is disallowing the actual A&G expense and adopts the partial approach of approving the lower of the audited/normative figures the Petitioner incurs substantial Financial loss.
- 2.6.27. Owing to such disallowance of the expenses which are in the nature of establishment expense under A&G expenses, the Petitioner has started deployment of contractual manpower for the activities like spot billing, Revenue collection to reduce its establishment nature of fixed expenditure on a long term basis and expenses recorded under such heads purely involves Man-Power, the petitioner is bound to claim such expenses under Employee Expenses.
- 2.6.28. Hence, the petitioner requests the Hon'ble Commission to recognize the said expenses as mentioned below as separate items of expenses and allow the same separately as a part of Employee Expenses over and above calculated by normative approach.

Table 2-10 Additional Employee Expenses (in Rs. Cr)

Particulars	MVVNL
Payment to Contractual Person	42.99
Expenses on Spot Billing Centre	218.95
Total	261.94

- 2.6.29. Below mentioned table shows the computation done by the petitioner for claiming Employee Expenses

Table 2-11 Computed Employee Expenses (in Rs. Cr)

Particulars	Trued-Up (FY 2019-20) (Rs. Cr)	Average CPI Escalation of last 3 years.	Computed (Rs. Cr)
Employee Expenses	760.12	5.35%	800.81

- 2.6.30. The Normative Employee expenses approved by the Hon'ble Commission and Employee Expenses claimed including the additional Employee Expenses for FY 2020-21 are shown in the Table below:

Table 2-12 Gross Employee Expenses for FY 2020-21 (in Rs. Cr)

SI No.	Particular	Approved in T.O dt. 11.11.2020	Claimed
A	Gross Employee Expenses after escalation	661.05	1,062.76
B	Less: Employee Expenses capitalized	327.29	373.40
C	Net Employee Expenses	333.76	689.36

Repairs & Maintenance Expenses (R&M)

- 2.6.31. The Petitioner has considered the trued-up value for FY 2019-20 as approved by the Hon'ble Commission is in Tariff order for FY 2021-22 as base number. Thereafter, the petitioner has considered same methodology and norms for the Truing-up of Repairs & Maintenance Expenses for FY 2020-21 on the normative basis in terms of the norms prescribed under the Tariff Regulations shown in the Table below:

Table 2-13 Computed R&M Expenses (Rs. Crore)

Particulars	Trued-Up Value (FY 2019-20) (Rs. Cr)	Average WPI Escalation of last 3 years.	Computed (Rs. Cr)
R&M Expenses	367.33	2.97%	378.23

- 2.6.32. The Normative R&M expenses approved by the Hon'ble Commission and Net R&M Expenses claimed for FY 2020-21 are shown in the Table below:

Table 2-14 Normative R&M Expenses for FY 2020-21 (Rs. Crore)

SI No.	Particulars	Approved in T.O dt. 11.11.2020	Normative
1	Gross R&M Expenses after escalation	315.06	378.23
2	Less: R&M Expenses capitalized	-	-
3	Net R&M Expenses	315.06	378.23

Administrative and General Expense (A&G)

- 2.6.33. The Petitioner has considered the trued-up value for FY 2019-20 as approved by the Commission in Tariff order for FY 2021-22 as base number. Thereafter, the petitioner has considered same methodology and norms for the Truing-up of Administrative and General Expense for FY 2020-21 on the normative basis in terms of the norms prescribed under the Tariff Regulations shown in the Table below:

Table 2-15 Computed A&G Expenses (Rs. Crore)

Particulars	Trued-Up Value (FY 2019-20) (Rs. Cr)	Average WPI Escalation of last 3 years.	Computed (Rs. Cr)
A&G Expenses	306.12	2.97%	315.21

- 2.6.34. The Normative A&G expenses approved by the Hon'ble Commission and Net A&G Expenses claimed for FY 2020-21 are shown in the Table below:

Table 2-16 Normative A&G Expenses for FY 2020-21 (Rs. Crore)

Sl No.	Particulars	Approved in T.O dt. 11.11.2020	Normative
1	Gross A&G Expenses after escalation	209.68	315.21
2	Less: A&G expenses capitalized	-	-
3	Net A&G expenses	209.68	315.21

- 2.6.35. Based on the above submission, the summary of the Operation & Maintenance expenses (O&M) approved in the Tariff Order for FY 2020-21 vis-a-vis the actual O&M expenses as per Audited Accounts and computed as normative are shown in the table below:

Table 2-17 Operation & Maintenance expenses claimed for FY 2020-21 (Rs. Crore)

Particulars	Approved in T.O. dt. 11.11.2020	Actual (A)	Claimed
Repair & Maintenance expenses	315.06	382.23	378.23
Employee expenses	661.05	689.36	1,062.76 [#]
Administrative and General expenses	209.68	573.23	315.21
Gross O&M Expenses	1,185.79	1,644.83	1,756.19
Less:			
Employee expenses capitalized	327.29	373.40	373.40
Administrative and General expenses capitalized	-	-	-
Gross expenses Capitalized*	327.29	373.40	373.40
Smart Meter Opex			45.74
Net O&M Expenses	858.50	1,271.43	1,428.54

*Gross expenses Capitalized is claimed as per the book of account for FY 2020-21

[#]Inc. expenses claimed under table 2-10

Smart Metering OPEX

- 2.6.36. It is hereby submitted that on 16.05.2018, Hon'ble Commission directed UPPCL to submit the detailed roll out plan of installation of smart meters by UP Discoms for approval.

- 2.6.37. UPPCL submitted the smart meter roll out plan under OPEX Model to Hon'ble Commission on 06.08.2018. In terms of the rollout plan Energy Efficiency Services Limited (EESL) will make the upfront capital investment during the built-up phase and will recover its investment out of gains of the project on OPEX basis. Accordingly, UP Discoms are required to pay monthly fee on OPEX basis as O&M expenditure to EESL on per meter per month basis. The per meter per month cost is calculated as total project cost spread over the actual recovery period, post integration of meters on per meter basis.
- 2.6.38. On 15.11.2018, Ld. UP Commission by its Order approved the Smart Meter rollout plan for State Discoms of Uttar Pradesh: -

Quote

"DISCOM will pay EESL on OPEX basis as O&M expenditure. The assets will be in the books of EESL till the transfer of assets at the end of project at zero value.

[..]

"Since installation of Smart Meters is a national programme and has produced very encouraging financial returns in private Discoms, the Commission approves the proposed roll out plan of UPPCL and Discoms submitted before the Commission "

Unquote

- 2.6.39. Further, it submitted that in terms of the National Tariff Policy 2016 (which has the force of law), MoP letter dated 08.09.2016 and Hon'ble Commission's direction in Order dated 15.11.2018, UP Discoms are mandated to implement the Smart Meter rollout plan in the state of Uttar Pradesh.
- 2.6.40. The additional O&M component against this plan was computed on the basis of per meter per month rate mentioned in the above referred order of the Commission. The amount sought as 'Additional O&M Expenses under smart metering' is payable to EESL to cover cost towards smart meter and box installation, AMI software cost, consumer indexing, training, integration and commissioning of AMI solution.
- 2.6.41. It may be noted that this cost has been proposed to be recovered under Opex model based on per meter per month basis and there is no additional burden of depreciation, interest and return on equity on the consumer. Such expenditure qualifies as Statutory expenses. In the regulatory framework it is a settled position that Statutory expenses are uncontrollable factors and are to be allowed as pass through in distribution tariff. As a result, thereof UP Discoms have incurred and will continue to incur substantial additional expenditure as quoted above.
- 2.6.42. It is further added that this type of expenses was not envisaged during projection of MYT O&M norms for FY 2017-18 to FY 2019-20. Further, O&M Norms approved by the Commission were based on five-year Audited Accounts, which didn't have any O&M expenses towards smart metering. The amount of this additional O&M has been entered as rent in the replies of comments on roll out plan submitted to Hon'ble Commission vide MD, UPPCL letter no. 352/CE(Com-II)/Smart Meter/18 dt. 25.09.2018.
- 2.6.43. In view of the above it is submitted that Hon'ble Commission completely being aware of the cost implication qua implementation of Smart Metering Rollout Plan has approved/allowed the same by its Order dated 15.11.2018.

- 2.6.44. Further, the approach of compensating the Opex cost with likely savings in billing and collection efficiency is not favourable for the Licensee. Presently, the tariff is already being determined based on 100% collection efficiency, despite the actual percentage being substantially lower. Therefore, even if billing and collection efficiency increases by installation of smart meters, the same will not have any impact on the tariff of the Discoms.
- 2.6.45. Moreover, the Hon'ble Commission in its Order dated 15.11.2018 has itself noted that the UP Discoms would incur substantial Opex cost (to be paid to EESL) towards implementation of Smart Metering Rollout Plans. Hence, there is no reason to now disallow the said cost, which is a Statutory expense and has to be mandatorily incurred by the Licensee.
- 2.6.46. It is pertinent to highlight that the smart meter roll-out plan on Opex model was submitted to Hon'ble Commission well before its implementation.
- 2.6.47. Further, Hon'ble Commission while approving the roll-out plan has not stated that the cost envisaged under the Opex model would not be allowed to be passed on in the ARR. Moreover, Hon'ble Commission in its Tariff Order dated 03.09.2019 stated that it will carry out detailed analysis of the additional O&M expenses (on account of implementation of smart meter roll out plan) for FY 2018-19 at the time of truing-up.
- 2.6.48. Accordingly, license has a legitimate expectation that after approval of the smart meter roll out plan (Opex model) the cost to be incurred by the licensees would be allowed to be recovered in tariff. Hence, such disallowance at this belated stage would be contrary to the principle of regulatory certainty, which is embedded in the Electricity Act and policies framed thereunder.
- 2.6.49. Therefore, this expense shall be considered under the head of A&G expenses as additional expenses.
- 2.6.50. Therefore, the Hon'ble Commission is requested to allow the smart meter Opex estimated by the Petitioner for FY 2020-21:

Table 2-18 Smart metering OPEX for FY 2020-21

Particulars	Smart Meters installed till Mar-20	Smart Meters installed till Mar-21	Rate (Rs./meter/month) including GST@18%	OPEX (Rs. Crore)
FY 2020-21		3,75,849	101.42	45.74

- 2.6.51. The Hon'ble Commission is requested to approve the same.

2.7. Capital Investment, Capitalisation and Financing

- 2.7.1. Details of the capex schemes (submitted in the MYT Formats) are shown in the Table below.

Table 2-19 Capex for FY 2020-21 (Rs Crore)

Particulars	Investments	Capitalisation
RGGVY 11th Plan	204.56	750.58
DDUGJY	94.55	462.83
IPDS	67.69	357.69
Saubhagya	198.94	736.22
Others	1,088.14	1,453.65
Total Investments (A)	1,145.44	3,252.53
Add: Employee Capitalization (B)	373.40	373.40
Add: Interest Capitalization (C)	135.04	135.04
Total (D= A+B+C)	1,653.88	3,760.97
Asset not belonging to Discoms (E)		
Total (F= D-E)	1,653.88	3,760.97

- 2.7.2. Considering the Capital Work in Progress Balances (CWIP) and Gross Fixed Asset (GFA) balances as per audited accounts, the Petitioner has derived the actual capital investments undertaken by it during FY 2020-21. The details are provided in the table below:

Table 2-20 Capital Investment in FY 2020-21 (Rs. Crore)

Particulars	Derivation	Approved in T.O 11.11.2020	Claimed
Opening WIP as on 1st April	A	6,811.99	6,508.26
Investments	B	2,429.40	1,145.44
Employee Expenses capitalization	C	327.29	373.40
A&G Expenses Capitalisation	D	-	-
Interest Capitalisation on Interest on long term loans	E	19.76	135.04
Total Investments	F= A+B+C+D+E	9,588.44	8,162.14
Transferred to GFA (Total Capitalisation)	G	3,835.38	3,760.97
Closing WIP	H=F-G	5,753.06	4,401.18

- 2.7.3. The Table below summarises the amounts received towards consumer contributions, capital grants and subsidies in FY 2020-21:

Table 2-21 Consumer Contributions, Capital Grants and Subsidies in FY 2020-21 (Rs. Crore)

Particulars	Approved in T.O dt. 11.11.2020	Claimed
Opening Balance of Consumer Contributions, Grants and Subsidies towards Cost of Capital Assets	5,175.79	5,344.00
Additions during the year includes consumer contribution and grants	1,558.15	203.48
Less: Amortisation on consumer contribution part only	47.43	136.98
Closing Balance	6,686.51	5,410.51

- 2.7.4. As discussed in above tables, the capital investment eligible for financing after deducting consumer contribution and grant is shown in the table below. The Petitioner has considered the same approach as in previous Orders and therefore, considered the funding of capital expenditure in the ratio of 70:30. Considering this approach, 70% of the capital expenditure undertaken during the year has been financed through loan and balance 30% has been financed through equity contributions.

Table 2-22 Financing of the Capital Investments in FY 2020-21 (Rs. Crore)

Particulars	Derivation	Approved in T.O dt. 11.11.2020	Claimed
Total Investment during the year (Asset Put to use)	A	2,429.40	3,760.97
Less:			
Consumer Contribution and Grants	B	1,558.15	203.48
Investment funded by debt and equity	C=A-B	871.25	3,557.48
Debt Funded	70% of C	609.88	2,490.24
Equity Funded	30% of C	261.38	1,067.25

2.8. Interest & Finance Charges

Interest on Long Term Loan

- 2.8.1. The petitioner has considered the same approach for the estimation of Interest on long Term Loan as approved by the Hon'ble Commission in its previous Tariff order for FY 2021-22. Petitioner had considered a normative tariff approach with a debt equity ratio of 70:30. Considering this approach, 70% of the capitalization undertaken (after deducting consumer contributions, capital subsidies and grants) in any year was financed through loan and balance 30% has been financed through equity contributions. The portion of capital expenditure financed through consumer contributions, capital subsidies and grants are separated and the depreciation, interest and return on equity thereon was not charged to the consumers. The amounts received as consumer contributions, capital subsidies and grants were traced from the audited accounts. Subsequently, the financing of the capital investment was worked out based on the debt equity ratio of 70:30 and allowable depreciation was considered as normative loan repayment.
- 2.8.2. The Petitioner has worked-out the interest on long term loan based on the same philosophy.
- 2.8.3. The opening balance of long term loan has been considered equivalent to the closing loan balance for FY 2019-20 as approved by the Hon'ble Commission in Tariff Order for FY 2021-22 dated 29.07.2021.
- 2.8.4. Allowable depreciation for the year has been considered as normative loan repayment. The actual weighted average rate (Details are submitted in Format F 31 of the MYT Tariff Formats) as per audited accounts has been considered for computing the eligible interest expenses.

- 2.8.5. Considering the above, the interest on long term loan has been computed below. The interest capitalisation has been considered as per audited accounts. The computations for interest on long term loan are shown in table below:

Table 2-23 Allowable Interest on Long Term Loan for FY 2020-21 (Rs. Crore)

Particulars	Approved in T.O. dated 11.11.2020	Claimed
Opening Loan	121.71	4,494.01
Additions (70% of Capitalization net of Consumer Contribution and Grants)	1,594.06	2,490.24
Less: Repayments (Depreciation allowable for the year)	208.23	614.13
Closing Loan Balance	1,507.54	6,370.12
Weighted Average Rate of Interest	7.48%	10.95%
Interest on long term loan	60.91	594.68
Less: Interest Capitalized	19.76	135.04
Net Interest on Loan term loan	41.15	459.64

- 2.8.6. The Petitioner requests Hon'ble Commission to allow interest on long-term loans for FY 2020-21 as computed in above table.

Interest on Consumer Security Deposits

- 2.8.7. The Petitioner humbly submits that the actual interest on consumer security deposit paid during FY 2020-21 as per audited accounts for FY 2020-21 against the approved figures in the Tariff Order is given in the table below.

Table 2-24 Interest on Security Deposit For FY 2020-21 (Rs. Crore)

Particulars	Approved in T.O. dated 11.11.2020	Claimed
Total Consumer Security Deposit	745.3	675.24
Interest on Security Deposit	32.65	31.32

- 2.8.8. The Petitioner requests the Hon'ble Commission to approve the consumer security deposit paid during FY 2020-21 as per audited accounts for FY 2020-21 given in the table above.

Bank and Finance Charge

- 2.8.9. The Petitioner humbly submits that is has incurred bank and finance charges as per the audited accounts for FY 2020-21 towards expenditures like bank charges, finance charges, etc. The Petitioner requests to approve the same.

Table 2-25 Bank and Finance charges for FY 2020-21 (Rs Crore)

Particulars	Revised estimates
Bank and Finance Charges	47.43

2.9. Interest on Working Capital

2.9.1. The Petitioner worked-out interest on working capital for FY 2020-21 as per Regulation 25 of the Multi Year Tariff Distribution Regulations, 2019. The Regulation 25 is quoted below:

“25. Interest on Working Capital

25.2 Distribution Business

(a) *The working capital requirement of the Distribution Business shall cover:*

- (i) *Operation and maintenance expenses for one month;*
- (ii) *Maintenance spares at 40% of the R&M expenses for two months; and*
- (iii) *One and half month equivalent of the expected revenue from charges for use of Distribution system at the prevailing Tariff (excluding Electricity Duty);*

minus

(iv) *Amount held as security deposits from Distribution System Users:*

Provided that for the purpose of Truing-Up for any year, the working capital requirement shall be re-computed on the basis of the values of components of working capital approved by the Commission in the Truing- Up;

(b) *Rate of interest on working capital shall be simple interest and shall be equal to the SBI MCLR (1 Year) on October 01, 2019 plus 250 basis points:*

Provided that for the purpose of Truing-Up for any year, simple interest on working capital shall be allowed at a rate equal to the weighted average SBI MCLR (1 Year) prevailing during the concerned Year plus 250 basis points.

(c) *Interest shall be allowed on consumer security deposits as per the provisions of the Electricity Supply Code, 2005 and its subsequent amendments/ addendums and the new Regulations made after repeal of the same.”*

2.9.2. The detailed working of Interest on Working Capital for FY 2020-21 is shown in table below:

Table 2-26 Interest on Working Capital for FY 2020-21 (Rs. Crore)

Particulars	Derivation	Approved in T.O dt. 11.11.2020	Claimed
One Month's O&M Expenses	A	71.54	115.23
One and half months equivalent of the expected revenue from charges for use of Distribution system at the prevailing Tariff (excluding Electricity Duty)	B	1,574.27	1,751.68
Maintenance spares @ 40% of R&M expenses for two month	C	21.00	25.22
Less: Security Deposit from consumers, if any	D	745.30	675.24

Particulars	Derivation	Approved in T.O dt. 11.11.2020	Claimed
Total Working Capital Requirement	E = A+B+C-D	921.52	1,216.89
Interest rate (actual wt. avg. MCLR rate of SBI for FY20 Plus 250 basis points)	F	10.65%	9.57%
Interest on working capital	G = E x F	98.14	116.46

2.9.3. The following table summarizes the Interest and Finance charges claimed by the Petitioner as against those approved by the Hon'ble Commission in the Tariff Order for FY 2020-21.

Table 2-27 Interest and Finance Charges for FY 2020-21 (Rs. Crore)

Particulars	Approved in T.O dt. 11.11.2020	Claimed
A: Interest on Long Term Loans		
Gross Interest on Long Term Loan	60.91	594.68
Less: Interest Capitalization	19.76	135.04
Net Interest on Long Term Loans	41.15	459.64
B: Finance and Other Charges		
Interest on Consumer Security Deposits	32.65	31.32
Bank/ Finance Charges		47.43
Total Finance Charges	32.65	78.75
C: Interest on Working Capital	98.14	116.46
Total (A+B+C)	171.94	654.84

2.9.4. The Petitioner requests the Hon'ble Commission to approve the Interest and Finance charges as shown in the above Table.

2.10. Depreciation

- 2.10.1. It is pertinent to highlight that Hon'ble Commission in its MYT Regulations, 2019 has changed the methodology for calculating depreciation. In erstwhile MYT Tariff Regulations, 2014 Depreciation was calculation based on WDV method whereas as per MYT Regulations, 2019 the same is calculated based on SLM method. The relevant clause of MYT Regulation, 2019 is mentioned below for reference.

Regulation 21: Depreciation

.....

“(b) Depreciation shall be computed annually based on. the Straight- Line Method at the rates stipulated in the Annexure- A to these Regulations.”

.....

- 2.10.2. Hon'ble Commission has also directed the licensees to maintain a separate individual asset wise Gross Block and Depreciation for assets capitalized after 1.4.2020 and separately from the Gross Block before 1.4.2020. Accordingly, from FY 2020-21 onwards the licensees have maintained two separate Gross Blocks one for assets up to 31.3.2020 (Part-A) and second for assets after 1.4.2020 (Part B) from 01.04.2020 onwards.
- 2.10.3. Since the methodology for calculating depreciation is changed, it is necessary to calculate the opening GFA without the impact of cumulative depreciation in it. To calculate the depreciation for Part- A for assets capitalised before 1.4.2020, the petitioner has taken last three years' (from FY 2017-18 to FY 2019-20) Commission approved Addition to GFA and Deduction of GFA. The Petitioner has considered the Trued-up Opening GFA for FY 2017-18 and further Hon'ble Commission approved additions and deductions are considered in it to derive the closing GFA for FY 2017- 18. The GFA so derived is considered as Opening GFA for FY 2018-19 and further Hon'ble Commission approved additions and deductions are considered in it to derive closing GFA for FY 2019-20. This GFA is considered as opening GFA for FY 2019-20 similarly closing GFA for FY 2019-20 is calculated. This closing GFA is considered as Opening GFA for FY 2020-21 so that the depreciation can be calculated by SLM methodology in line with regulation of Hon'ble Commission. Below mentioned table summarizes the calculation of Opening and Closing GFA.

Table 2-28 Parameters for GFA Calculation

Particulars	Derivation	GFA Calculation MVVNL		
		FY 18	FY19	FY 20
		Trued-Up		
Opening GFA	A	6,591.91	7,579.04	9,694.46
Additions to GFA (Trued-Up)	B	1,473.96	2,683.20	3,742.94
Less: Deductions to GFA (Trued-up)	C	486.83	567.78	639.40
Closing GFA	D=A+B-C	7,579.04	9,694.46	12,798.00

- 2.10.4. The Petitioner has computed the allowable depreciation expense on the GFA base as per audited accounts for FY 2020-21 and at the rates stipulated by Hon'ble Commission in Annexure A of MYT Regulations, 2019. The Petitioner has computed the depreciation only on the depreciable asset base and has excluded the non-depreciable assets such as land, land rights, etc. Further, the Petitioner has traced the figures in respect of depreciation charged on assets created out of consumer contributions, capital grants and subsidies from the audited accounts for FY 2020-21. This equivalent depreciation amounting has been reduced from the allowable depreciation for FY 2020-21. Moreover, the depreciation has been calculated in two parts (Part A & B) for the asset blocks depreciated before 01.04.2020 and asset blocks depreciated as on 01.02.2020 as per the SLM methodology prescribed in MYT Regulations, 2019. The deduction is GFA is considered as per actual. Addition to GFA is considered in GFA for assets after 01.04.2020. The Petitioner requests the Hon'ble Commission to approve the same. Considering this philosophy, the gross entitlement towards depreciation has been computed as shown in the Tables below:

Table 2-29 Gross Allowable Depreciation for assets before 01.04.2020 of MVVNL for FY 2020-21 (Rs. Crore) Part A

GROSS ALLOWABLE DEPRECIATION FOR ASSETS BEFORE 01.04.2020 OF MVVNL FOR FY 2020-21 (RS. CRORE) PART A								
Sr. No	Particulars	Opening GFA (as on 31.3.2020)	Cumulative Depreciation	Deduction to GFA	Closing GFA	Average GFA	Depreciation Rate	Allowable Gross Depreciation
	Land on lease	1.00	-	-	-	-		-
1	Buildings	193.04	48.30	0.00	193.03	193.04	3.34%	6.45
2	Other Civil Works	13.30	3.33	-	13.30	13.30	3.34%	0.44
3	Plants & Machinery	3,738.28	935.33	753.61	2,984.67	3,361.48	5.28%	177.49
4	Lines, Cables, Networks etc.	8,740.20	2,186.83	11.78	8,728.42	8,734.31	5.28%	461.17
5	Vehicles	5.64	1.41	0.00	5.64	5.64	6.33%	0.36

GROSS ALLOWABLE DEPRECIATION FOR ASSETS BEFORE 01.04.2020 OF MVVNL FOR FY 2020-21 (RS. CRORE) PART A								
Sr. No	Particulars	Opening GFA (as on 31.3.2020)	Cumulative Depreciation	Deduction to GFA	Closing GFA	Average GFA	Depreciation Rate	Allowable Gross Depreciation
6	Furniture & Fixtures	11.28	2.82	-	11.28	11.28	6.33%	0.71
7	Office Equipment's	95.26	23.83	-0.13	95.40	95.33	6.33%	6.03
8	Capital Expenditure on Assets not belonging to utility	-	-	-				
9	TOTAL	12,798.00	3,201.85	765.26	12,031.74	12,414.37	5.26%	652.65

Table 2-30 Gross allowable depreciation for assets as on 01.04.2020 of MVVNL for FY 2020-21 (Rs. Crore) Part B

GROSS ALLOWABLE DEPRECIATION FOR ASSETS AS ON 01.04.2020 OF MVVNL FOR FY 2020-21 (RS. CRORE) PART B									
S.No.	Particulars	Opening GFA net of Grant as on 1.4.20	Addition to GFA	Deduction of Grants	Deduction to GFA	Closing GFA	Average GFA	Depreciation Rate	Allowable Gross Depreciation
1	Land & Land Rights	-	-	-	-	-	-	0.00%	0.00
2	Buildings	-	60.33	-	-	60.33	30.17	3.34%	1.01
3	Other Civil Works	-	4.16	-	-	4.16	2.08	3.34%	0.07
4	Plant & Machinery	-	932.89	-	-	932.89	466.45	5.28%	24.63
5	Lines, Cables, Network etc.	-	2,728.16	-	-	2,728.16	1,364.08	5.28%	72.02
6	Vehicles	-	1.76	-	-	1.76	0.88	6.33%	0.06
7	Furniture & Fixtures	-	3.52	-	-	3.52	1.76	6.33%	0.11
8	Office Equipments	-	29.82	-	-	29.82	14.91	6.33%	0.94
9	Capital Expenditure on Assets not belonging to utility		-	-	-	-			
10	Total Fixed Assets	-	3,760.97	-	-	3,760.97			
11	Non depreciable assets (Land & Land Rights)	-	-			-			
12	Depreciable assets	-	3,760.97			3,760.97	1,880.33	5.26%	98.84

- 2.10.5. Accordingly, the depreciation as approved by the Hon'ble Commission in its Tariff Order FY 2020-21 and as computed above is shown as under:

Table 2-31 Net Allowable Depreciation for FY 2020-21 (Rs. Crore)

Particulars	Approved in T.O 11.11.2021	Claimed
Gross Allowable Depreciation	255.66	751.49
Less: Equivalent amount of depreciation on assets acquired out of the Consumer Contribution and GoUP Subsidy	47.43	137.36
Net Allowable Depreciation	208.23	614.13

2.11. Provision for Bad and Doubtful Debts

- 2.11.1. The Regulation 46 of the MYT Distribution Regulations, 2019 provides for expenses under bad and doubtful debts to the extent of 2% of the revenue receivables as specified below:

"46.1. For any Year, the Commission may allow a provision for write off of bad and doubtful debts up to 2% of the amount shown as Revenue Receivables from sale of electricity in the audited accounts of the Distribution Licensee for that Year or the actual write off of bad debts, whichever is less:

Provided further that such provision allowed by the Commission for any Year shall not exceed the actual provision for write off of bad and doubtful debts made by the Distribution Licensee in the audited accounts of that Year:

Provided that the Commission, in its ARR / Tariff Order, may provisionally approve provision for write off of bad and doubtful debts based on the actual provision for write off of bad and doubtful debts made by the Distribution Licensee in the latest Audited Accounts available for the Petitioner, and as allowed by the Commission:

Provided further that if subsequent to the write off of a particular bad debt, revenue is realised from such bad debt, the same shall be included under the Non-Tariff Income of the year in which such revenue is realised."

- 2.11.2. The Petitioner has computed bad and doubtful debts at 2% of the revenue receivables as per audited accounts of FY 2020-21.

Table 2-32 Allowable Provision for Bad and Doubtful Debts for FY 2020-21 (Rs Crore)

Particulars	Approved in T.O 11.11.2020	Claimed
Total Revenue Receivables from Retail Sales	12594.19	12,668.47
% of Provision for Bad and Doubtful Debts	1.65%	2%
Bad and Doubtful Debts as per governing regulations	207.75	253.37
Bad and Doubtful Debts as per Audited Account	-	121.61
Bad Debt Claimed	-	121.61

- 2.11.3. The Petitioner requests to approve the bad debts claimed in above Table.

2.12. Return on Equity

- 2.12.1. The Regulation 22 of the Distribution MYT Regulations, 2019 provides for return on equity @15% as specified below:

“22.1 Return on equity shall be computed in Rs. terms on equity base at the rate of 14.5% post-tax per annum for the Transmission Licensee and at the rate of 15% post-tax per annum for Distribution Licensee respectively as determined in accordance with Regulation 20:

Provided that assets funded by Consumer Contribution / Deposit works, Capital Subsidies / Grants and corresponding Depreciation shall not form part of the Capital Cost. Actual Equity infused by the Licensee as per book value shall be considered and shall be used for computation in these Regulations.”

- 2.12.2. The Petitioner has considered closing equity approved by the Hon’ble Commission in its true up Order for FY 2019-20 as opening for FY 2020-21. Equity addition during the year has been considered 30% of GFA addition during the year net of consumer contribution, capital subsidies/ grants.

- 2.12.3. The Return on Equity (RoE) for FY 2020-21 is shown below:

Table 2-33 Return on Equity RoE for FY 2020-21 (Rs Crore)

Particulars	Approved in T.O 11.11.2021	Claimed
Opening Equity	1,411.39	2,269.63
Additions (30% of Capitalization net of Consumer Contribution and Grants)	1,150.61	3,760.97
Less: Consumer Contribution	106.67	203.48
Less: Grants	360.78	-
Closing Equity	2,094.55	3,336.88
Rate of Return on Equity (%)	15.00%	15.00%
Allowable Return on Equity	262.95	420.49

- 2.12.4. The Petitioner requests the Hon’ble Commission to approve the RoE as claimed in the above Table.

2.13. Revenue from Sale of Power

- 2.13.1. The audited accounts have reported the actual revenue from sale of power to be **Rs. 12,668.47 Crores** towards electricity sales of 18,765 MU. The petitioner requests the Hon’ble Commission to approve the same.

2.14. Non-Tariff Incomes (NTI)

- 2.14.1. Hon’ble BERC in its TO dated: 26, March 2021 has allowed the Discom of Bihar not to treat Financing Cost of DPS as NTI. Further the financing cost incurred on the principal amount on which the DPS was

charges was reduced from Total NTI to arrive at Net NTI. The relevant extract of the same is mentioned below:

“4.21.23 Petitioners, in their submission, have considered the financing cost on DPS (Rs. 134.66 Crore for NBPDCI and Rs. 60.15 Crore for SBPDCL) and adjusted the same against the non-tariff income and net non-tariff income claimed in truing up for FY 2019-20. Commission found the claim of petitioner’s in line with the methodology considered by the Commission for financing of outstanding dues and the judgment of the APTEL dated 30 July, 2010 in Appeal No. 153 of 2009 between North Delhi Power Ltd. Vs DERC. The Judgement given by APTEL is as below-

Para 58(i). Therefore, the State Commission is directed to rectify its computation of the financing cost relating to the late payment surcharge for the FY 2007-08 at the prevalent market lending rate during that period keeping in view the prevailing Prime Lending Rate.”

2.14.2. Furthermore, it can also be seen from above para that Ld. Bihar Commission has relied on APTEL Judgment dated 30 July, 2010 wherein the state commission of Delhi was directed to rectify the computation of financing cost relating to DPS.

2.14.3. It is pertinent to highlight that the Hon’ble Commission in its last Tariff Order directed to demonstrate the genuineness and need of financing DPS for allowing the same. It is submitted that Principal amount on which the DPS was charged to consumers was Rs. 1560.49 Cr. which is substantially high and cannot be managed by working capital. Hence financing of DPS was required to carry out the smooth working of Discom. The Discom has procured the short term loan at 9.57% and has incurred Rs. 149.34 Cr. toward the financing of DPS for smooth operation.

2.14.4. Accordingly, the Petitioner is claiming the financing costs of DPS as shown in the Table below:

Table 2-34 Financing costs of DPS for FY 2020-21 (Rs Crore)

Particulars	FY 2020-21
Delayed payment Surcharge Received	383.86
DPS grossed-up at 2% per month	24%
Amount after grossing-up of DPS	1,599.40
Applicable interest rate for working capital finance	9.57%
Financing costs of DPS	153.06

2.14.5. Further the Petitioner has worked out the additional interest incurred for funding the Cash gap due to delay in payment by consumers, etc. as shown in table below. The same is worked out from the Audited balance sheet of the petitioner.

Table 2-35 Additional Interest incurred for funding FY 2020-21 (Rs Crore)

Total Interest Incurred in FY 2020-21 (Rs. Cr) (A)	Total Interest and Finance Charges claimed (Rs. Cr) (B)	Additional Interest incurred by Discoms for funding the Cash gap due to delay in payment by consumers, etc (Rs. Cr.) [A-B]
1336.65	654.84	681.80

2.14.6. However, the Petitioner is claiming only Normative Financing Cost of DPS as show in above Paras.

2.14.7. The approved and claimed non-tariff income is shown in table below:

Table 2-36 Non- Tariff income for FY 2020-21 (Rs Crore)

Particulars	Approved in T.O. dated 11.11.2020	Claimed
Fixed Deposit / DPS		383.86
Rents		0.09
Interest income on loans / advances to employees;		6.62
Interest on Advances to Suppliers / Contractors		14.00
Miscellaneous Receipts from consumers		17.36
Less: Financing cost of DPS		153.06
Total	34.73	268.86

2.14.8. The Petitioner requests the Hon'ble Commission to allow the cost of financing of DPS as a part of the Non-Tariff income claimed in above Table.

2.15. GoUP Subsidy

2.15.1. The details of GoUP subsidy for FY 2020-21 as approved by the Commission in Tariff Order dated November 11, 2020 and as submitted by State Discoms for FY 2020-21 is shown in the Table below:

Table 2-37 Consolidated GoUP Subsidy for FY 2020-21 (Rs Crore)

Particulars	Approved in order dated November 11, 2020	Actual Receipt
MVVNL	2,080.93	1,345.00

2.16. Aggregate Revenue Requirement (ARR) for FY 2020-21

2.16.1. The Aggregate Revenue Requirement for FY 2020-21 after final truing up is summarised in the table below:

Table 2-38 Aggregate Revenue Requirement (ARR) for FY 2020-21 (Rs Crore)

Sr. No.	Particular	FY 2020-21	Claimed
		Approved	
1.	Power Purchase Expenses including PGCIL charges	11,508.91	12,878.18
2.	Intra state Transmission Charges	508.95	643.11
3.	Actual O&M expenses net of capitalisation	858.50	1,428.54
4.	Interest and Finance charges	171.94	654.84
5.	Depreciation	208.23	614.13
6.	Bad and Doubtful Debts	207.75	121.61
7.	Gross Expenditure	13,464.28	16,340.42
8.	Add: Return on Equity	262.95	420.49
9.	Less: Non-tariff Incomes	34.73	268.86
10.	Less: revenue from Cross-subsidy (Short-term open access consumers)	-	-
11.	Annual Revenue Requirement	13,692.50	16,492.06
12.	Revenue from Tariff incl DPS	12,594.19	12,668.47
13.	GoUP Subsidy	2,080.93	1,345.00
14.	Net Revenue (Gap)/Surplus	982.62	(2,478.58)

2.17. Final Revenue Gap after considering Carrying Cost on account of Revenue Gap

2.17.1. In line with Regulation 28.5 of UPERC MYT Regulations 2019 the Petitioner has calculated the Net Revenue Gap which is to be adjusted in FY 2022-23 including the carrying cost. Further it is pertinent to highlight that the petitioner has considered the carrying cost rate equivalent to rate applicable for Interest of Working capital for FY 2020-21 in line with Regulation 28.5 of UPERC MYT Regulations 2019.

2.17.2. Below mentioned table shows the Net Revenue Gap after considering the carrying cost.

Sr. No.	Particulars	Rate of Interest (%)	Claimed
1	Revenue (Gap) after Truing up of FY 2020-21		(2,478.58)
	Carrying Cost for FY 2020-21 (Half Year)	9.57%	(118.60)
	Carrying Cost for FY 2021-22 (Full Year)	9.57%	(237.20)
	Carrying Cost for FY 2022-23 (Half Year)	9.57%	(118.60)
	Total Revenue (Gap) for FY 2020-21		(2,952.99)

3. Annual Performance Review (APR) for FY 2021-22

3.1. Consumption Parameters: Consumer Numbers, Connected Load and Sales

- 3.1.1. It is submitted that there is deviation in approved sales and revised sales for FY 2021-22. Further, sales are derivative of demand which is also uncontrollable in nature. It is to be informed that under the Saubhagya Yojana, the Petitioner has added substantial number of Lifeline consumers at LT network. These consumers are small consumers which are qualified under tariff sub-category "Lifeline consumers". The consumers which are flagged under different LMV-1 sub-categories are now readjusted under LMV-1 category as per their consumption pattern. The consumers having 1 kW load and consumption upto 100 units are covered in Life line category and any change in this criteria will result in change of sub category / slab of such consumers. This is a dynamic situation which may keep on changing on monthly basis.
- 3.1.2. The Category-wise approved billing determinants vis-à-vis revised billing determinants for FY 2021-22 is shown in the Table below:

Table 3-1: Revised consumption Parameters for FY 2021-22

Category	Approved			Revised Estimate		
	Consumers (Nos)	Load (kW)	Sales (MU)	Consumers (Nos)	Load (kW)	Sales (MU)
LMV-1 Domestic light fan & power	7,566,175	9,831,474	10,098	7,779,751	10,036,293	11,652
LMV-2-Non domestic light fan & power	388,824	1,112,931	1,532	391,250	1,084,501	1,637
LMV-3 Public lamps	1,479	104,698	348	1,253	122,122	313
LMV-4 Light, fan & power for public/private institution	23,809	142,973	271	27,146	147,160	255
LMV-5 Private tube well/pumping sets	244,721	1,074,853	1,974	235,804	1,275,168	2,172
LMV-6 Small & medium power upto 100 hp/75kw	22,107	275,164	577	38,285	414,006	480
LMV-7 Public water works	3,792	115,196	491	3,794	94,372	420
LMV-8 State tube wells & pumps canal upto 100 hp (lmv-8)	10,487	175,767	876	11,052	110,465	917
Lmv-9 Temporary supply	5,727	19,967	97	6,299	19,855	21
LMV- 10 Departmental employees	27,749	87,575	167	23,449	75,334	150
LMV -11 Electrical Vehicles	-	-	-	20	3,473	4
HV-1 Non industrial bulk load	1,215	405,860	763	1,357	859,460	815

TRUE-UP FOR FY 2020-21, APR for FY 2021--22 and ARR FOR FY 2022-

Category	Approved			Revised Estimate		
	Consumers (Nos)	Load (kW)	Sales (MU)	Consumers (Nos)	Load (kW)	Sales (MU)
HV-2 Large & heavy power above 100 bhp (75 kw)	2,152	889,007	1,538	2,267	817,086	1,639
HV-3 Railway traction	3	19,000	55	2	9,671	32
HV-4 Lift irrigation & p. canal above 100 bhp (75kw)	11	7,647	82	34	29,132	69
Bulk Supply	-	-	-	-	-	-
Extra State Consumer	1	5,000	24	1	5,000	9
Total	8,298,250	14,267,113	18,894	8,521,763	15,103,097	20,586

3.2. Category / Sub-category / Slab wise ABR

Below mentioned is the estimated ABR Consolidated of all Discoms.

Existing Consumer Category/sub-category/Slab		Consumer (No.)	Load (kW)	Energy Sales (MU)	Fixed Charges (Rs. Cr)	Energy Charges (Rs. Cr)	Total Revenue (Rs. Cr.)	ABR (Rs/kWh) FY 2021-22
CONSUMER CATEGORY / SUB-CATEGORY/Slab								
LMV-1	DOMESTIC LIGHT, FAN & POWER:							
(i)	Lifeline Consumers: With contracted load of 1.00 kW, Energy consumption upto 100 kWh/month (both Rural and Urban)	1,33,83,584	1,33,20,115.82	13,472.70	465.07	4,041.81	4,506.88	3.35
(a)	Consumers getting supply as per 'Rural Schedule' except Lifeline consumers	52,69,282	81,31,665.58	8,810.85	1,982.03	2,748.20	4,730.23	5.37
(ii)	Un-Metered:	5,97,695	6,93,312.75	1,930.18	670.20	-	670.20	3.47
(iii)	Metered: (Dom: Rural Schedule (metered) other than BPL)	46,71,587	74,38,352.83	6,880.66	1,311.83	2,748.20	4,060.03	5.90
	Upto 100 kWh / Month	23,73,594	29,57,489.38	3,637.40	540.55	1,218.53	1,759.08	4.84
	101-150 kWh / Month	12,55,920	20,70,723.83	1,221.32	356.06	470.21	826.27	6.77
	151-300 kWh / Month	6,24,974	17,65,103.08	1,236.11	305.65	618.05	923.70	7.47
	301-500 kWh / Month	3,86,808	4,91,476.80	601.74	81.96	330.96	412.91	6.86
	Above 500 kWh / Month	30,292	1,53,559.74	184.10	27.61	110.46	138.07	7.50
							-	-
							-	-
(b)	Supply at single point for bulk loads (50 kW and above, Supplied at any voltage):	493	4,03,969.66	735.42	53.42	514.80	568.22	7.73
(c)	Other Metered Domestic Consumers:	89,21,477	1,84,49,373.15	22,424.21	2,349.18	13,164.76	15,513.94	6.92
(i)	Other Metered Domestic Consumers other than BPL						-	-
	Upto150 kWh / month	56,19,204	99,48,041.33	12,920.11	1,264.88	7,106.06	8,370.94	6.48
	151-300 kWh / month	15,66,217	38,15,573.53	4,521.76	485.25	2,713.06	3,198.31	7.07
	301- 500 kWh / month	10,40,016	29,15,836.57	2,839.80	369.10	1,845.87	2,214.96	7.80
	Above 500 kWh / month	6,96,039	17,69,921.72	2,142.54	229.96	1,499.78	1,729.73	8.07
							-	-
	Sub Total LMV-1	2,75,74,836	4,03,05,124.21	45,443.17	4,849.70	20,469.57	25,319.27	5.57
							-	-
LMV-2	NON-DOMESTIC LIGHT, FAN & POWER:							
(a)	Consumers getting supply as per "Rural Schedule"	2,20,607	6,90,732.15	1,463.82	116.53	805.10	921.63	6.30
(i)	Un-Metered	-	-	-	19.27	-	19.27	-
(ii)	Metered	2,20,607	6,90,732.15	1,463.82	97.26	805.10	902.36	6.16
(b)	Private Advertising / Signposts / Sign Boards / Glow Signs / Flex	19,871	74,084.35	65.87	-	118.57	118.57	18.00
	Metered						-	-

Existing Consumer Category/sub-category/Slab		Consumer (No.)	Load (kW)	Energy Sales (MU)	Fixed Charges (Rs. Cr)	Energy Charges (Rs. Cr)	Total Revenue (Rs. Cr.)	ABR (Rs/kWh) FY 2021-22
CONSUMER CATEGORY / SUB-CATEGORY/Slab								
(c)	Other Metered Consumers: (For All Loads)	14,10,075	37,77,986.33	5,190.62	1,699.21	4,066.54	5,765.75	11.11
	Upto 2 kW	9,77,030	17,30,829.40	2,544.41	678.80	1,941.94	2,620.74	10.30
	Upto 300 kWh / month	7,45,553	13,90,653.22	2,171.85	545.38	1,628.89	2,174.27	10.01
	301 – 1000 kWh / month	2,16,619	3,23,756.58	369.61	126.98	310.47	437.45	11.84
	Above 1000 kWh/Month	14,857	16,419.60	2.95	6.44	2.59	9.02	11.84
							-	-
	Above 2 kW to 4 kW	3,23,298	10,42,881.19	1,519.77	483.34	1,193.62	1,676.97	11.03
	Upto 300 kWh / month	2,44,671	7,90,267.27	962.89	366.26	722.17	1,088.43	11.30
	301 – 1000 kWh / month	63,745	2,04,400.67	451.88	94.74	379.58	474.32	10.50
	Above 1000 kWh/Month	14,882	48,213.24	105.00	22.35	91.88	114.22	10.88
							-	-
	Above 4 kW	1,09,747	10,04,275.74	1,126.44	537.07	930.98	1,468.05	13.03
	Upto 300 kWh / month	74,566	3,40,745.42	371.39	182.21	278.54	460.75	12.41
	From 301-1000 kWh / month	28,886	2,27,862.32	235.23	121.85	197.59	319.44	13.58
	Above 1001 kWh / month	6,295	4,35,668.00	519.82	233.01	454.84	687.85	13.23
	Sub Total LMV-2	16,50,554	45,42,802.83	6,720.31	1,815.74	4,990.22	6,805.95	10.13
							-	-
LMV-3	PUBLIC LAMPS:						-	-
(i)	Un-Metered Supply:	1,365	49,830.50	164.64	312.51	-	312.51	
	Gram Panchayat.	668	6,233.00	20.46	23.56	-	23.56	
	Nagar Palika and Nagar Panchayat	466	22,581.50	68.71	130.07	-	130.07	
	Nagar Nigam	231	21,016.00	75.48	158.88	-	158.88	
(ii)	Metered Supply:	3,272	2,16,098.68	570.17	47.85	476.71	524.57	9.20
	Gram Panchayat	440	2,594.88	6.60	0.62	4.95	5.56	8.43
	Nagar Palika and Nagar Panchayat	1,822	59,492.50	145.41	13.16	116.33	129.49	8.91
	Nagar Nigam	1,010	1,54,011.30	418.16	34.07	355.44	389.51	9.31
	Sub Total LMV-3	4,637	2,65,929.18	734.81	360.36	476.71	837.08	11.39
							-	-
LMV-4	LIGHT, FAN & POWER FOR PUBLIC & PRIVATE INSTITUTION:						-	-
4 (a)	For Public Institutions:	92,895	4,41,188.28	751.03	158.07	628.31	786.38	10.47
	From 0-1000 kWh/ month	82,082	3,90,719.66	521.05	139.99	429.87	569.86	10.94
	From 1001-2000 kWh/ month	8,310	38,803.40	111.57	13.90	94.84	108.74	9.75
	Above 2001 kWh / month (From 2001st unit onwards)	2,503	11,665.22	118.40	4.18	103.60	107.78	9.10
4 (b)	For Private Institutions:	13,787	1,56,902.12	213.69	73.20	195.49	268.69	12.57

Existing Consumer Category/sub-category/Slab	Consumer (No.)	Load (kW)	Energy Sales (MU)	Fixed Charges (Rs. Cr)	Energy Charges (Rs. Cr)	Total Revenue (Rs. Cr.)	ABR (Rs/kWh) FY 2021-22
CONSUMER CATEGORY / SUB-CATEGORY/Slab							
Upto 3 kW: Upto 0-1000 kWh/Month	7,851	24,497.22	70.95	10.26	63.86	74.12	10.45
Upto 3 kW: Above 1000 kWh/Month	2,171	7,445.92	17.97	3.11	16.72	19.83	11.03
Above 3 kW: Upto 0-1000 kWh/Month	2,518	38,603.77	37.08	18.47	33.37	51.84	13.98
Above 3 kW: Above 1000 kWh/Month	1,247	86,355.21	87.68	41.35	81.55	122.90	14.02
Sub Total LMV-4	1,06,681	5,98,090.40	964.72	231.27	823.80	1,055.07	10.94
						-	-
LMV-5 SMALL POWER FOR PRIVATE TUBE WELL/ PUMPING SETS FOR IRRIGATION PURPOSES:							
						-	-
(a) Consumers getting supply as per "Rural Schedule"	12,54,772	76,83,346.35	13,516.31	2,029.50	312.36	2,341.86	1.73
<i>(i) Un-Metered Supply</i>	12,07,522	72,45,678.00	11,954.50	1,981.39	-	1,981.39	1.66
Rural Schedule	12,07,522	72,45,678.00	11,954.50	1,981.39	-	1,981.39	1.66
Rural Schedule Pumps	-	-	-	-	-	-	-
<i>(ii) Metered Supply</i>	47,250	4,37,668.35	1,561.81	48.11	312.36	360.47	2.31
Rural Schedule	47,250	4,37,668.35	1,561.81	48.11	312.36	360.47	2.31
Rural Schedule Pumps	-	-	-	-	-	-	-
<i>(iii) Energy Efficient Pumps</i>	-	-	-	-	-	-	-
(b) Consumers getting supply as per "Urban Schedule (Metered Supply)"	43,833	4,81,029.10	1,875.92	98.19	1,125.55	1,223.74	6.52
Sub Total LMV-5	12,98,605	81,64,375.45	15,392.22	2,127.69	1,437.91	3,565.60	2.32
						-	-
LMV-6 SMALL AND MEDIUM POWER:							
						-	-
(a) Consumers getting supply as per "Rural Schedule"	46,207	4,24,399.00	551.63	101.35	381.17	482.52	8.75
Upto 1000 kWh/ month	38,512	3,56,118.90	292.53	85.07	197.53	282.60	9.66
Upto 2000 kWh/ month	5,200	39,310.37	123.15	9.37	84.29	93.66	7.61
Above 2000 kWh / month	2,495	28,969.74	135.95	6.91	99.35	106.25	7.82
(b) Consumers getting supply other than "Rural Schedule"	1,40,524	18,02,518.89	2,583.22	450.29	1,961.21	2,411.51	9.34
Upto 1000 kWh/ month	1,98,132	10,05,682.57	1,291.61	450.29	982.68	1,432.97	11.09
05:00 hrs - 11:00 hrs	15,172	1,52,766.08	73.89	38.66	45.85	84.51	11.44
11:00 hrs - 17:00 hrs	44,281	4,40,127.04	216.65	111.57	158.16	269.72	12.45
17:00 hrs - 23:00 hrs	21,039	2,04,860.40	102.85	51.88	86.34	138.22	13.44
23:00 hrs - 05:00 hrs	18,633	2,07,929.05	88.75	52.64	64.79	117.43	13.23
Upto 2000 kWh/ month	51,202	3,89,879.58	717.59	95.52	535.16	630.68	8.79
05:00 hrs - 11:00 hrs	49,668	57,225.37	54.84	13.95	34.49	48.44	8.83
11:00 hrs - 17:00 hrs	1,49,256	1,69,402.14	161.32	41.58	119.37	160.96	9.98
17:00 hrs - 23:00 hrs	69,032	78,898.92	79.21	19.30	67.41	86.72	10.95
23:00 hrs - 05:00 hrs	74,134	84,353.15	66.17	20.68	48.96	69.64	10.53

Existing Consumer Category/sub-category/Slab		Consumer (No.)	Load (kW)	Energy Sales (MU)	Fixed Charges (Rs. Cr)	Energy Charges (Rs. Cr)	Total Revenue (Rs. Cr.)	ABR (Rs/kWh) FY 2021-22
CONSUMER CATEGORY / SUB-CATEGORY/Slab								
	Above 2000 kWh / month	31,714	4,06,956.73	901.68	100.02	717.68	817.71	9.07
	05:00 hrs - 11:00 hrs	2,457	58,544.75	69.23	14.30	46.49	60.79	8.78
	11:00 hrs - 17:00 hrs	6,968	1,78,036.81	198.09	43.86	156.49	200.34	10.11
	17:00 hrs - 23:00 hrs	3,419	87,971.68	98.24	21.67	89.25	110.91	11.29
	23:00 hrs - 05:00 hrs	2,955	82,403.49	82.37	20.20	65.08	85.27	10.35
	Sub Total LMV-6	1,86,731	22,26,917.89	3,134.85	551.64	2,342.39	2,894.03	9.23
LMV-7	PUBLIC WATER WORKS:						-	-
(a)	Consumers getting supply other than "Rural Schedule"	13,750	3,96,682.15	1,268.20	175.55	1,090.65	1,266.19	9.98
(b)	Consumers getting supply as per "Rural Schedule"	10,724	1,26,104.60	413.09	49.39	328.61	378.01	9.15
	Sub Total LMV-7	24,474	5,22,786.75	1,681.29	224.94	1,419.26	1,644.20	9.78
LMV-8	STW, PANCHAYTI RAJ TUBE WELL & PUMPED CANALS:						-	-
(i)	Metered	24,136	3,07,466.47	2,253.59	139.40	1,915.55	2,054.95	9.12
(ii)	Un-Metered	11,449	1,97,238.00	1,468.21	1,570.50	-	1,570.50	10.70
	Sub Total LMV-8	35,585	5,04,704.47	3,721.80	1,709.90	1,915.55	3,625.45	9.74
							-	-
LMV-9	TEMPORARY SUPPLY:						-	-
(b)	Metered	20,555	1,04,165.78	157.78	33.41	138.71	172.11	10.91
	Sub Total LMV-9	20,582	1,04,233.75	163.22	34.17	138.71	172.87	10.59
LMV-10	DEPARTMENTAL EMPLOYEES AND PENSIONERS:						-	-
		84,752	3,44,303	532	294	-	294.12	5.53
	Sub Total LMV-10	84,752	3,44,303.04	531.72	294.12	-	294.12	5.53
							-	-
LMV-11	ELECTRIC VEHICLE CHARGING:						-	-
	Multi Storey Buildings (covered under LMV-1b & HV-1b of the Rate Schedule)						-	-
	Multi Story Buildings (Covered under LMV-1b)						-	-
	Multi Story Buildings (Covered under HV-1b)						-	-
	Public Charging Stations		4,734.40	4.17	-	3.08	3.08	7.38
	Public Charging Station (LT)	67	997	1	-	1	0.62	7.70
	Public Charging Station (HT)	12	3,738	3	-	2	2.46	7.30
	Sub Total LMV-11	79	4,734.40	4.17	-	3.08	3.08	7.38
							-	-
HV-1	NON-INDUSTRIAL BULK LOAD:						-	-

Existing Consumer Category/sub-category/Slab		Consumer (No.)	Load (kW)	Energy Sales (MU)	Fixed Charges (Rs. Cr)	Energy Charges (Rs. Cr)	Total Revenue (Rs. Cr.)	ABR (Rs/kWh) FY 2021-22
CONSUMER CATEGORY / SUB-CATEGORY/Slab								
(a)	Commercial Loads / Private Institutions / Non-Domestic Bulk Power consumer with contracted Load 75 kW & above and getting supply at single point on 11 kV & above:	2,441	9,64,641.42	1,662.72	334.45	1,431.85	1,766.30	10.62
	<i>For Supply at 11 kV</i>	1,292	7,04,838	1,522	241	1,313	1,554.57	10.21
	0-2500 kVAh / month	1,169	2,15,142	225	65	187	251.58	11.20
	Above 2500 kVAh / month	123	4,89,695.54	1,297.56	176.72	1,126.28	1,303.00	10.04
	<i>For Supply above 11 kV</i>	1,150	2,59,803.41	140.62	92.98	118.75	211.73	15.06
	0-2500 kVAh / month	872	19,968.60	13.75	7.03	11.17	18.20	13.23
	Above 2500 kVAh / month	278	2,39,834.81	126.87	85.94	107.58	193.53	15.25
(b)	Public Institutions, Registered Societies, Residential Colonies / Townships, Residential Multi-Storied Buildings including Residential Multi-Storied Buildings with contracted load 75 kW & above and getting supply at Single Point on 11 kV & above voltage levels:	2,881	13,27,299.45	1,662.72	405.74	1,309.70	1,715.45	10.32
	<i>For Supply at 11 kV</i>	1,749	9,92,594.25	1,522.10	298.03	1,201.75	1,499.78	9.85
	0-2500 kVAh / month	1,594	30,411.52	35.65	9.16	27.45	36.61	10.27
	Above 2500 kVAh / month	155	9,62,182.73	1,486.45	288.87	1,174.30	1,463.17	9.84
	<i>For Supply above 11 kV</i>	1,132	3,34,705.20	140.62	107.71	107.96	215.67	15.34
	0-2500 kVAh / month	973	41,712.80	16.10	13.43	12.08	25.51	15.84
	Above 2500 kVAh / month	159	2,92,992.40	124.52	94.28	95.88	190.16	15.27
	Sub Total HV-1	5,323	22,91,940.88	3,325.45	740.19	2,741.56	3,481.75	10.47
							-	-
HV-2	LARGE AND HEAVY POWER:						-	-
(A)	Urban Schedule:	12,833	44,59,810.06	11,086.60	1,172.84	7,757.04	8,929.88	8.05
	Supply up to 11 kV	12,493	34,17,761.92	8,351.78	909.91	5,924.19	6,834.10	8.18
	05:00 hrs - 11:00 hrs	2,836	7,64,100.43	952.45	-	676.24	676.24	7.10
	11:00 hrs - 17:00 hrs	4,200	11,18,053.69	1,394.34	-	989.98	989.98	7.10
	17:00 hrs - 23:00 hrs	2,737	7,46,361.10	909.73	-	742.80	742.80	8.17
	23:00 hrs - 05:00 hrs	2,720	7,89,246.70	919.37	-	554.84	554.84	6.04
							-	-
	Supply above 11 kV and up to 66 kV	305	7,42,750.74	2,187.01	191.25	1,488.86	1,680.11	7.68
	05:00 hrs - 11:00 hrs	70	1,71,878.83	250.50	-	170.34	170.34	6.80
	11:00 hrs - 17:00 hrs	103	2,49,097.25	369.33	-	251.15	251.15	6.80
	17:00 hrs - 23:00 hrs	69	1,69,919.07	246.93	-	193.10	193.10	7.82
	23:00 hrs - 05:00 hrs	63	1,51,855.58	226.74	-	131.05	131.05	5.78
							-	-
	Supply above 66 kV and up to 132 kV	29	2,10,148.84	332.54	50.32	213.18	263.50	7.92

Existing Consumer Category/sub-category/Slab		Consumer (No.)	Load (kW)	Energy Sales (MU)	Fixed Charges (Rs. Cr)	Energy Charges (Rs. Cr)	Total Revenue (Rs. Cr.)	ABR (Rs/kWh) FY 2021-22
CONSUMER CATEGORY / SUB-CATEGORY/Slab								
	05:00 hrs - 11:00 hrs	6	47,230.86	38.68	-	24.75	24.75	6.40
	11:00 hrs - 17:00 hrs	10	73,344.53	55.92	-	35.79	35.79	6.40
	17:00 hrs - 23:00 hrs	6	45,137.58	38.00	-	27.97	27.97	7.36
	23:00 hrs - 05:00 hrs	6	44,435.86	33.68	-	18.32	18.32	5.44
							-	-
	Supply above 132 kV	6	89,148.56	215.27	21.35	130.81	152.16	7.07
	<i>Summer Months (April to September)</i>	6	89,148.56	107.63	21.35	65.63	86.98	8.08
	05:00 hrs - 11:00 hrs	1	18,788.32	21.49	4.50	11.14	15.64	7.28
	11:00 hrs - 17:00 hrs	2	31,110.67	38.44	7.45	23.45	30.90	8.04
	17:00 hrs - 23:00 hrs	1	18,620.07	21.25	4.46	14.91	19.37	9.11
	23:00 hrs - 05:00 hrs	1	20,629.50	26.46	4.94	16.14	21.08	7.97
(B)	Rural Schedule	752	2,63,155.51	587.91	64.79	386.11	450.91	7.67
	Supply up to 11 kV	752	2,63,155.51	587.91	64.79	386.11	450.91	7.67
	Sub Total HV-2	13,585	47,22,965.57	11,674.51	1,237.63	8,143.15	9,380.78	8.04
							-	-
HV-3	RAILWAY TRACTION & METRO RAIL:						-	-
(A)	Railway Traction:	3	46,800.00	72.11	16.85	61.29	78.14	10.84
	For Supply at and above 132 kV	3	46,800.00	72.11	16.85	61.29	78.14	10.84
	For Supply below 132 kV	-	-	-	-	-	-	-
(B)	METRO RAIL	7	72,330.34	118.30	18.11	86.36	104.46	8.83
	Sub Total HV-3	10	1,19,130.34	190.41	34.96	147.65	182.60	9.59
							-	-
HV-4	LIFT IRRIGATION WORKS:						-	-
	For Supply at 11 kV	101	95,236.12	313.83	29.87	266.75	296.62	9.45
	For Supply above 11 kV upto 66 kV	33	99,395.24	350.95	30.26	294.79	325.05	9.26
	For Supply above 66 kV upto 132 kV	-	-	-	-	-	-	-
	Sub Total HV-4	134	1,94,631.36	664.77	60.13	561.55	621.67	9.35
							-	-
	Extra State Consumer	2	5,410	12	-	9	9.08	7.83
							-	-
	Bulk Supply Consumer	1	11,61,313.00	2,186.43	-	1,089.15	1,089.15	4.98
							-	-
	Grand Total	3,10,06,571	6,60,79,394	96,545	14,272	46,709	60,982	6.32

3.3. Distribution Loss

- 3.3.1. UP State owned Distribution Licensee are in process of formulation of Revamp Distribution Sector Scheme in the State. Accordingly, based on the actual distribution loss of the discom, MVVNL has estimated the Loss trajectories for the Coming years for the implementation of the scheme. The detailed approach has been discussed in the true-up section above.
- 3.3.2. Accordingly, considering the abovementioned fact and upcoming GoI Revamp Distribution Scheme the Petitioner requests the Hon'ble Commission to consider the Distribution loss trajectory as mentioned in the table below and reconsider its decision of setting an unachievable Distribution loss trajectory for the Petitioner.

Table 3-2 Distribution Loss considered

Distribution loss	FY 2021-22
MVVNL	19.19%

3.4. Energy Balance

- 3.4.1. The Energy Balance as approved by the Hon'ble Commission vis-à-vis normative Energy Balance for FY 2021-22 is shown in the Table below:

Table 3-3 Energy Balance for FY 2021-22

Particulars	Approved in T.O. dt. 29.07.2021	Revised Estimated
Retail Sales (MU)	18,894	20,586
Distribution Losses (%)	11.04%	19.19%
Energy at DISCOM Periphery for Retail Sales (MU)	21,240	25,474
Intra-State Transmission Losses %	3.33%	3.33%
Energy Available at State periphery for Transmission (MU)	21,972	26,351
Inter State Losses (MU)	260	423
Inter-State Transmission Losses % (% computed on Total input energy)	2.94%	1.58%
Purchases Required & Billed Energy (MU)	22,232	26,774

3.5. Power Purchase Expense

- 3.5.1. UPPCL is procuring power on behalf of Discoms at consolidated level. Accordingly, the Power Purchase section represents the consolidated power purchase at UPPCL level. The consolidated energy balance (detailed Energy Balance with further break-up of inter-State energy has been submitted in Format F13L of MYT Formats) for FY 2021-22 is as follows: -

Table 3-4 Consolidated Energy Balance for FY 2021-22

Particulars	Approved in T.O. dated 29.07.2021	Revised Estimate
Retail Sales (MU)	95,419.90	96,545.44
Distribution Losses (%)	11.08%	19.54%
Energy at DISCOM Periphery for Retail Sales (MU)	107,315.40	119,994.32
Intra-State Transmission Losses %	3.33%	3.33%
Energy Available at State periphery for Transmission (MU)	111,012.09	124,127.77
Inter State Losses (MU)	1,312.73	1,991.64
Inter-State Transmission Losses % (% computed on Total input energy)	2.94%	1.58%
Purchases Required & Billed Energy (MU)	1,12,324.82	126,119.41

3.5.2. The Power Purchase Cost for FY 2021-22 is estimated based on the audited data available for Power Purchase quantum and cost for FY 2021-22 available till July 21. The audited power purchase cost details for FY 2021-22 is depicted as below: -

Table 3-5 Generating station Wise Power Purchase Cost for FY 2021-22

S. No	Source of Power (Station wise)	FY 2021-22										
		Units (MU)	Annual Fixed Charges		Annual Energy/ Variable charge		Annual Other Cost		Late payment Surcharge	Total cost		Avg. Cost of Energy at Generator Bus
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)		(Rs. Cr.)	(Rs. / kWh)	
A	Long term Sources											
a	Power procured from own Generating Stations (if any)											
b	From State Generating Stations Thermal											
1	ANPARA-A	3,419.97	0.74	254.02	1.93	659.70		-		913.72	2.67	
2	ANPARA-B	6,835.14	0.46	311.73	1.80	1,232.12		-		1,543.85	2.26	
3	PANKI	-	-	-	-	-		-		-	-	
4	PARICHHA	-	-	-	-	-		-		-	-	
3	PARICHHA EXT.	460.02	1.90	87.59	3.80	175.02		-		262.60	5.71	
4	OBRA-A	-	-	-	-	-		-		-	-	
5	OBRA-B	4,094.27	0.80	327.31	2.37	968.37		-2.43		1,293.25	3.16	
6	HARDUAGANJ	145.95	5.27	76.92	2.37	34.59		-		111.51	7.64	
7	HARDUAGANJ EXT.	1,465.33	3.26	478.34	3.68	539.68		-		1,018.02	6.95	
8	PARICHHA EXT. STAGE-II	1,627.71	3.10	505.02	3.70	601.90		-		1,106.92	6.80	
9	ANPARA-D	5,042.44	1.55	780.72	1.76	887.38		-		1,668.11	3.31	
10	Panki Extension	1,018.54	2.46	250.25		374.28		0.01		624.54		

S. No	Source of Power (Station wise)	FY 2021-22										
		Units (MU)	Annual Fixed Charges		Annual Energy/ Variable charge		Annual Other Cost		Late payment Surcharge	Total cost		Avg. Cost of Energy at Generator Bus
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)		(Rs. Cr.)	(Rs. / kWh)	
11	HARDUAGANJ EXT. Stage II	1,142.08	2.03	231.59		372.78		-			604.37	
12	OBRA-C	-	-	-		-		-			-	
13	Jawaharpur	-	-	-		-		-			-	
	UPRVUNL Consolidated	-	-	-		-		88.79			88.79	-
	Sub-Total	25,251.44		3,303.49		5,845.82		86.37			9,235.69	3.66
	From State Generating Stations Hydro											
1	RIHAND	523.99	0.39	20.40	0.85	44.65		-			65.06	1.24
2	OBRA (H)	301.77	0.30	9.01	0.50	15.12		-			24.13	0.80
3	MATATILA	55.10	0.41	2.25	0.65	3.59		-			5.84	1.06
4	KHARA	262.81	0.52	13.70	0.44	11.68		-			25.38	0.97
5	UGC	26.40	-	-	2.85	7.52		-			7.52	2.85
6	SHEETLA	1.57	-	-	1.82	0.28		-			0.28	1.82
7	BELKA	3.23	-	-	2.13	0.69		-			0.69	2.13
8	BABAIL	4.44	-	-	2.83	1.26		-			1.26	2.83
	UPJVNL CONSOLIDATED	-	-	-	-	-		-			-	-
	Sub-Total	1,179.31		45.37		84.79		-			130.15	1.10
	From Central Sector Generating Stations											
a	Thermal (NTPC)											

S. No	Source of Power (Station wise)	FY 2021-22										
		Units (MU)	Annual Fixed Charges		Annual Energy/ Variable charge		Annual Other Cost		Late payment Surcharge	Total cost		Avg. Cost of Energy at Generator Bus
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)		(Rs. Cr.)	(Rs. / kWh)	
1	ANTA GPS	23.44	22.01	51.58	6.00	14.06		-0.63			65.01	27.74
2	AURAIYA GPS	62.95	16.15	101.67	7.40	46.60		-0.79			147.48	23.43
3	DADRI GPS	353.99	3.00	106.04	7.88	278.92		26.04			411.00	11.61
4	JHANOR GPS	0.04	12.70	0.05	2.60	0.01		0.00			0.06	15.38
5	KAWAS GPS	0.04	11.22	0.04	2.49	0.01		-0.00			0.05	13.70
6	TANDA TPS	932.98	3.56	332.53	3.52	328.06		11.70			672.28	7.21
7	FGUTPS-1	816.04	1.97	160.49	3.24	264.46		10.83			435.78	5.34
8	FGUTPS-2	522.22	1.64	85.55	3.29	171.89		37.05			294.49	5.64
9	FGUTPS-3	283.96	2.01	57.07	3.29	93.55		5.33			155.94	5.49
10	FGUTPS-4	1,010.98	2.28	230.25	3.12	315.78		11.06			557.09	5.51
11	FSTPS	105.99	1.17	12.36	3.00	31.82		4.14			48.32	4.56
12	KHTPS-1	305.95	1.59	48.57	2.52	76.97		0.44			125.98	4.12
13	KHTPS-2	1,080.90	1.51	163.62	2.42	261.21		-1.67			423.16	3.91
14	NCTPS-1	777.49	0.65	50.53	3.12	242.65		1.92			295.09	3.80
15	NCTPS-2	295.90	3.63	107.47	3.19	94.28		2.84			204.59	6.91
16	RIHAND-1	2,125.46	0.83	176.13	1.46	310.03		1.88			488.04	2.30
17	RIHAND-2	1,707.55	0.76	129.48	1.46	248.69		1.43			379.60	2.22
18	RIHAND-3	2,302.22	1.36	312.48	1.44	332.06		6.02			650.56	2.83
19	SINGRAULI	4,425.62	0.70	310.04	1.53	676.51		-0.37			986.18	2.23
20	KORBA-I STPS	16.78	0.64	1.07	1.41	2.37		0.04			3.48	2.08
21	KORBA-III STPS	8.34	1.23	1.03	1.40	1.17		0.03			2.23	2.67
22	MAUDA-I STPS	20.40	2.41	4.92	3.26	6.64		0.16			11.72	5.75
23	MAUDA-II STPS	49.09	1.64	8.05	3.44	16.88		0.00			24.93	5.08
24	SOLAPUR TPS	14.96	3.46	5.18	3.55	5.31		-0.02			10.47	7.00
25	SIPAT-I	28.82	1.32	3.80	1.53	4.40		0.02			8.22	2.85
26	SIPAT-II STPS	10.34	1.23	1.27	1.54	1.60		0.02			2.89	2.80

S. No	Source of Power (Station wise)	FY 2021-22										
		Units (MU)	Annual Fixed Charges		Annual Energy/ Variable charge		Annual Other Cost		Late payment Surcharge	Total cost		Avg. Cost of Energy at Generator Bus
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)		(Rs. Cr.)	(Rs. / kWh)	
27	VINDHYACHAL-I STPS	15.36	0.91	1.40	1.67	2.57		0.01			3.98	2.59
28	VINDHYACHAL-II STPS	9.13	0.79	0.72	1.61	1.47		0.02			2.22	2.43
29	VINDHYACHAL-III STPS	10.01	1.17	1.17	1.61	1.61		0.00			2.78	2.78
30	VINDHYACHAL-IV STPS	14.11	1.68	2.37	1.60	2.26		0.01			4.64	3.29
31	VINDHYACHAL-V STPS	7.89	1.76	1.39	1.64	1.30		0.00			2.69	3.41
32	Tanda Stage II	4,328.94	1.64	711.43	2.71	1,175.11		20.14			1,906.68	4.40
34	SINGRAULI STAGE III	-	-	-	-	-		-			-	-
35	Indira Gandhi STPS, Jhajjar	-	-	-	-	-		-			-	-
36	GADARWARA STPS-I	12.94	3.76	4.86	2.93	3.79		-0.05			8.59	6.64
37	LARA STPS-I	22.10	1.97	4.35	2.26	4.99		-0.01			9.33	4.22
38	KHARGONE STPS	15.65	3.06	4.79	2.98	4.67		-0.04			9.42	6.02
	NTPC CONSOLIDATED	2,292.88	-	-	-	-		1,011.94			1,011.94	4.41
	Sub-Total	24,011.47		3,193.74		5,023.71		1,149.48			9,366.93	
e	NPCIL											
1	KAPS	3.06	-	-	2.29	0.70		-0.02			0.68	2.23
2	NAPP	1,141.16	-	-	3.03	345.72		30.23			375.95	3.29
3	TAPP-3 & 4	11.49	-	-	3.38	3.88		0.00			3.88	3.38
4	RAPP-3 & 4	493.27	-	-	3.33	164.04		-2.96			161.09	3.27
5	RAPP-5 & 6	855.97	-	-	3.90	333.88		-5.68			328.20	3.83
	Sub-Total	2,504.95		-		848.23		21.57			869.80	3.47
f	Hydro (NHPC)											
1	SALAL	226.96	0.85	19.20	0.75	17.10		12.28			48.58	2.14
2	TANAKPUR	91.45	2.27	20.75	1.65	15.10		0.01			35.86	3.92

S. No	Source of Power (Station wise)	FY 2021-22										
		Units (MU)	Annual Fixed Charges		Annual Energy/ Variable charge		Annual Other Cost		Late payment Surcharge	Total cost		Avg. Cost of Energy at Generator Bus
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)		(Rs. Cr.)	(Rs. / kWh)	
3	CHAMERA-I	388.04	1.01	39.38	1.15	44.67		0.20			84.24	2.17
4	URI	593.87	0.92	54.49	0.91	53.85		11.08			119.43	2.01
5	CHAMERA-II	370.89	1.06	39.39	1.02	37.91		0.04			77.34	2.09
6	DHAULIGANGA	299.70	1.47	44.05	1.22	36.64		0.18			80.86	2.70
7	DULHASTI	584.94	2.73	159.75	2.83	165.28		17.02			342.05	5.85
8	SEWA-II	32.25	1.77	5.72	2.70	8.71		0.05			14.48	4.49
9	CHAMERA-III	249.46	2.53	63.18	1.98	49.38		0.14			112.70	4.52
10	URI-II	401.88	2.12	85.17	2.18	87.70		14.77			187.64	4.67
11	PARBATI-III	154.78	4.62	71.45	1.55	24.01		0.06			95.52	6.17
12	KISHANGANGA	641.43	2.15	137.90	2.01	128.80		4.73			271.43	4.23
13	PARBATI-II	57.34	0.85	4.89	2.30	13.16		-			18.05	3.15
14	SUBANSIRI LOWER	-	-	-	-	-		-			-	-
15	PAKALDUL	-	-	-	-	-		-			-	-
	NHPC Consolidated	-	-	-	-	-		-			-	-
	Sub-Total	4,092.98		745.31		682.31		60.56			1,488.18	3.64
g	HYDRO (NTPC)											
1	KOLDAM HPS	670.76	2.59	173.75	2.48	166.36		0.01			340.11	5.07
2	TAPOVAN VISHNUGARH	-	-	-	-	-		-			-	-
3	LATA TAPOVAN HEP	-	-	-	-	-		-			-	-
4	SINGRAULI SHPS	11.03	4.85	5.35	4.25	4.69		0.00			10.03	9.10
	Sub-Total	681.79		179.09		171.04		0.01			350.15	5.14
h	THDC											
	HYDRO											

S. No	Source of Power (Station wise)	FY 2021-22										
		Units (MU)	Annual Fixed Charges		Annual Energy/ Variable charge		Annual Other Cost		Late payment Surcharge	Total cost		Avg. Cost of Energy at Generator Bus
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)		(Rs. Cr.)	(Rs. / kWh)	
1	TEHRI	1,248.56	1.74	217.79	2.27	283.76		6.58			508.13	4.07
2	KOTESHWAR	494.86	2.04	100.76	2.51	124.26		0.07			225.09	4.55
3	DHUKWAN	44.86	-	-	4.30	19.29		0.16			19.45	4.34
4	VISHNUGARH PIPAL KOTHI	-	-	-	-	-		-			-	-
	THDC Consolidated	-	-	-	-	-		-			-	-
	Thermal											
1	KHURJA STPP											
	Sub-Total	1,788.27		318.54		427.31		6.82			752.67	4.21
i	SJVN											
1	RAMPUR	326.52	2.69	87.98	2.11	69.02		16.09			173.09	5.30
2	NATHPA JHAKRI	1,277.73	1.50	191.56	1.12	143.47		4.29			339.32	2.66
	Sub-Total	1,604.26		279.54		212.48		20.38			512.40	3.19
j	NEEPCO											
1	Kameng HEP	253.73	-	-	4.02	101.94		0.13			102.07	4.02
k	IPP/JV											
	HYDRO											
1	TALA	123.04	-	-	2.16	26.58		0.01			26.59	2.16
2	VISHNU PRAYAG	1,605.79	0.16	26.41	1.02	163.20		-51.75			137.87	0.86
3	KARCHAM	817.32	2.07	169.38	1.61	131.24		1.95			302.56	3.70
4	TEESTA-III	903.32	3.33	300.64	2.71	244.86		4.39			549.89	6.09
5	SRI NAGAR HEP	1,214.14	4.17	506.50	3.19	387.16		-			893.66	7.36
6	Rajghat Hydro	-	-	-	-	-		-			-	-

S. No	Source of Power (Station wise)	FY 2021-22											
		Units (MU)	Annual Fixed Charges		Annual Energy/ Variable charge		Annual Other Cost		Late payment Surcharge	Total cost		Avg. Cost of Energy at Generator Bus	
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)		(Rs. Cr.)	(Rs. / kWh)		(Rs. Cr.)
7	Hydro (Competitive Bidding)	67.01			-	19.29					-	19.29	#DIV/0!
	Thermal												
1	Meja Thermal Power Plant	6,323.95	2.12	1,340.10	2.54	1,605.34		12.98			2,958.42	4.68	
2	LANCO	6,845.25	0.85	585.00	1.96	1,341.89		65.03			1,991.92	2.91	
3	APCPL											-	
4	BEPL BARKHERA	270.39	3.46	93.63	3.65	98.77		15.85			208.25	7.70	
5	BEPL KHAMBHAKHERA	267.32	3.54	94.62	3.66	97.85		-			192.47	7.20	
6	BEPL KUNDRAKHI	328.47	2.87	94.20	3.29	108.10		-			202.30	6.16	
7	BEPL MAQSOODAPUR	265.17	3.52	93.36	3.54	94.00		-			187.36	7.07	
8	BEPL UTRAULA	304.75	3.18	96.89	3.47	105.85		-			202.74	6.65	
9	KSK MAHANADI	4,096.12	3.33	1,363.58	2.65	1,085.27		-54.99			2,393.86	5.84	
10	LALITPUR	9,932.20	5.19	5,157.63	3.03	3,007.40		49.74			8,214.77	8.27	
11	M.B.POWER	2,324.58	2.77	645.00	2.28	529.22		8.54			1,182.76	5.09	
12	PRAYAGRAJ POWER	9,690.81	1.37	1,326.92	2.32	2,249.07		13.19			3,589.19	3.70	
13	R.K.M.POWER	2,338.00	2.62	612.84	1.92	449.09		0.77			1,062.70	4.55	
14	ROSA-1&2	4,534.05	2.77	1,257.53	2.96	1,344.14		-35.19			2,566.48	5.66	
15	SASAN	3,666.74	0.15	54.63	1.14	416.31		16.94			487.89	1.33	
16	TRN ENERGY	978.23	1.58	154.90	1.61	157.37		-30.96			281.30	2.88	
17	NABINAGAR POWER PROJECT	820.16	2.30	188.38	2.16	177.00		7.90			373.28	4.55	
18	Ghatampur	334.38	5.88	196.63	2.25	75.38		-			272.00	8.13	
	Sub-Total	58,051.19		14,358.78		13,914.38		24.40			28,297.55	4.87	
	Total	119,419.38	1.88	22,423.87	2.29	27,312.01		1,369.72			51,105.60	4.28	

S. No	Source of Power (Station wise)	FY 2021-22										
		Units (MU)	Annual Fixed Charges		Annual Energy/ Variable charge		Annual Other Cost		Late payment Surcharge	Total cost		Avg. Cost of Energy at Generator Bus
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)		(Rs. Cr.)	(Rs. / kWh)	
B	Medium term Sources											
C	Short term Sources	420.04	-	-	5.50	231.02		-			231.02	5.50
	Other Sources Sub- total	420.04	-	-	5.50	231.02		-			231.02	5.50
D	Cogen/ Captive											
	Baggasse/Cogen/ CPP 1	1,958.73	0.57	110.76	2.89	565.83		0.95			677.54	3.46
	Baggasse/Cogen/ CPP 2	-	-	-	-	-		-			-	-
	Sub-Total Cogen/ Captive	1,958.73	0.57	110.76	2.89	565.83		0.95			677.54	3.46
E	Bilateral & Others (Power purchased through Trading)	-3,866.23	0.93	-359.29	2.37	-916.65		8.24			-1,267.70	3.28
1	Solar (Existing)	4,518.89	-	-	3.77	1,703.35		-0.89			1,702.46	3.77
2	Sub-Total Solar	4,518.89	-	-	3.77	1,703.35		-0.89			1,702.46	3.77
3	Solar (FY 21)											
4	Solar (FY 22)	156.09	-	-	3.00	46.83		-			46.83	3.00
5	Solar (FY 23)											
6	SOLAR FY 24											
7	SOLAR FY 25											
	Sub-Total Solar	4,674.98		-		1,750.18		-0.89			1,749.29	3.74

S. No	Source of Power (Station wise)	FY 2021-22										
		Units (MU)	Annual Fixed Charges		Annual Energy/ Variable charge		Annual Other Cost		Late payment Surcharge	Total cost		Avg. Cost of Energy at Generator Bus
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)		(Rs. Cr.)	(Rs. / kWh)	
G	Non-Solar (Renewable)											
1	WIND (Existing)							-			-	-
2	WIND	2,127.33	-	-	3.05	649.27		0.12			649.39	3.05
3	WIND (FY 22)	437.08	-	-	3.33	145.33		-			145.33	3.33
4	WIND (FY 23)	-	-	-	-	-		-			-	-
6	Biomass Existing	36.18	-	-	6.38	23.07		-			23.07	6.38
7	Biomass FY 20											
8	MSW FY 21	47.79	-	-	7.48	35.75		-			35.75	7.48
	Sub-total RE other than solar	2,648.38		-		853.43		0.12			853.55	3.22
	Other											
1	Slop Based Power Project	45.90	1.44	6.63	1.44	6.63		-			13.26	2.89
H	NVVN Thermal	633.78	-	-	3.20	203.10		2.66			205.75	3.25
	NVVN Solar	184.45	-	-	7.82	144.25		6.85			151.10	8.19
I	Short Term Sources	420.04	-	-	5.50	231.02		-			231.02	5.50
J	REC											
K	Banking	-	-	-	-	-		0.23			0.23	-
L	Transmission Charges	-	-	-	-	-		6,014.40			6,014.40	-
	RRAS	-	-	-	-	-		-39.65			-39.65	-
	Any Other Charges	-	-	-	-	-		-			-	-
	Less											

TRUE-UP FOR FY 2020-21, APR for FY 2021--22 and ARR FOR FY 2022-

S. No	Source of Power (Station wise)	FY 2021-22										
		Units (MU)	Annual Fixed Charges		Annual Energy/ Variable charge		Annual Other Cost		Late payment Surcharge	Total cost		Avg. Cost of Energy at Generator Bus
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)		(Rs. / kWh)	(Rs. Cr.)	
	Late Payment Surcharge							-			-	
	Grand Total	126,119.41		22,181.96		30,149.80		7,362.62			59,694.38	4.73

Differential Bulk Supply Tariff (DBST)

3.5.3. As the revised estimates of distribution loss for the Petitioner is different from the distribution loss level approved by the Hon'ble Commission, the power purchase cost has been worked out on the normative power procurement quantum based on the Hon'ble Commission's approved distribution loss level. Accordingly, the Differential Bulk Supply Tariff (DBST) for FY 2021-22 had been computed and thereafter, the Petitioner had worked out the power purchase cost for FY 2021-22 on the same.

3.5.4. Computation of DBST as per the Commission approved methodology is shown in the below:

Table 3-6 Computation of DBST for FY 2021-22

S.No.	Particulars	Formulae	DVVNL	PVVNL	PuVVNL	MVVNL	KESCO	Total
1	Revenue from Tariff including subsidy (Rs Cr)	A	15,434.97	25,359.37	16,452.18	15,430.20	2,809.44	75,486.16
2	Energy Sales (MU)	B	20,926.50	29,513.96	22,028.44	20,586.03	3,490.52	96,545.44
3	Power Procurement Cost							
A1	Power Procurement Cost – Allocated and Unallocated PPAs (Rs Cr)							54,916.59
A2	Inter State Transmission Charges (Rs Cr)							4777.79
A1+A2	Total Power Procurement Cost excluding intra state Transmission Charges (In Rs Cr)	C						59694.38
4	Power Procurement cost of Allocated PPAs (Rs Cr)	D	2137.85	4154.55	2268.52	2268.52	179.46	11,008.90
5	Total Power Required at Discom Periphery (MU)	E	27,746.32	35,531.70	27,398.30	25,473.97	3,844.02	119,994.32
6	Power at Discom Periphery from allocated PPAs (MU)	F	5627.42	11560.77	5741.90	5741.90	470.59	29,142.57
7	Other Cost (Intra State Transmission, O&M, Interest, Dep etc.) (Rs. Cr.)	G	3,517.08	4,338.03	4,905.81	3,900.25	587.50	17,248.68
8	ABR (Rs/ Unit)	$H=(A/B)*10$	7.38	8.59	7.47	7.50	8.05	7.82
9	Other Cost (Rs/Unit of Sale)	$I=G*10/B$	1.68	1.47	2.23	1.89	1.68	1.79
10	Power Purchase Rate							
A	Allocated PPAs per unit of sale (Rs/unit)	$J=D*10/B$	1.02	1.41	1.03	1.10	0.51	1.14
B	Unallocated PPAs per unit of sale	$K=(C-\text{Total PP at "D"})*10/\text{Total Sale at "B"}$			5.04			

TRUE-UP FOR FY 2020-21, APR for FY 2021--22 and ARR FOR FY 2022-

S.No.	Particulars	Formulae	DVVNL	PVVNL	PuVVNL	MVVNL	KESCO	Total
11	Revenue available for unallocated PPAs (Rs./unit of sale)	$L=H-I-J$	4.67	5.71	4.21	4.50	5.85	4.89
12	Power Purchase Allocation (per unit of sale) "K" in the ratio of available Revenue "L"	M	4.82	5.89	4.34	4.64	6.03	5.04
13	Total Power Purchase cost per unit of sale including allocated PPAs	$N=J+M$	5.84	7.30	5.37	5.74	6.55	6.18
14	Total Power Purchase Cost (Rs Crs)	$O=N*B/10$	12,219.59	21,541.64	11,832.57	11,815.65	2,284.94	59,694.38
	DBST (Rs/Unit)							
15	DBST Computation of Allocated PPAs	P	3.80	3.59	3.95	3.95	3.81	3.78
16	DBST Computation of Unallocated PPAs	$Q=M*B/(E-F)$	4.56	7.25	4.42	4.84	6.24	5.36
17	DBST of total PPAs	$R=O*10/E$	4.40	6.06	4.32	4.64	5.94	4.975

- 3.5.5. The Petitioner has worked out the power purchase cost for FY 2021-22 based on the above Differential Bulk Supply Tariff (DBST). The allowable power purchase cost for FY 2021-22 is shown in the table below:

Table 3-7 Power Purchase Cost for FY 2021-22

Particulars	Approved in T.O. dt. 29.07.2021	Revised Estimates
Allowable Power Purchase (MU)	21,240	25,474
DBST (Rs./kWh)	5.43	4.64
Power Procurement Cost (Rs. Crore)	11,530.48	11,810.85

*DBST rate considered as mentioned in table above.

3.6. Intra-State Transmission Charges

- 3.6.1. The intra-State Transmission charges (including SLDC charges) computed based on approved transmission rate is shown in the Table below:

Table 3-8 Intra-State Transmission Charges for FY 2021-22

Particulars	Unit	Approved in T.O. dt. 29.07.2021	Claimed
Units Wheeled	MU	21,240.39	25,473.97
Transmission Rate as approved by UPERC for UPPTCL for FY 2021-22 in TO dated 29.06.2021	Rs/kWh	0.24	0.24
Transmission Charges	Rs Crore	514.28	616.72

- 3.6.2. It is submitted that the variation in intra state Transmission charges are on account of variation in the Units wheeled.

3.7. Operation and Maintenance Expenses

- 3.7.1. Operation and Maintenance Expenses (O&M expenses) comprises of employee expenses, repair and maintenance expenses and administrative and general expenses. The detailed approach has been discussed in the true-up section above.

Employee Expenses

- 3.7.2. The Petitioner has considered the same methodology approved by the Hon'ble Commission in the Tariff Order for FY 2021-22, for the APR of Employee expenses for FY 2021-22. The base year value is considered as true-up value claimed for FY 2020-21. The computation for FY 2021-22 is shown below.

Table 3-9 Computed Employee Expenses for FY 2021-22

Particulars	Claimed in Instant Petition for FY 2020-21	Average CPI Escalation of last 3 years.	Computed (Rs. Cr)
Employee Expenses	1,062.76	6.00%	1,126.54

- 3.7.3. Further, the capitalisation has been projected based on same ratio of employee expenses capitalisation and employee expenses for FY 2020-21 (True-up year). Accordingly, Employee Expenses and its capitalisation determined for FY 2021-22 is shown in table below.

Table 3-10 Employee Expenses for FY 2021-22

SI No.	Particular	Approved in T.O 29.7.2021	Normative
A	Gross Employee Expenses after escalation	745.30	1,126.54
B	Less: Employee Expenses capitalized	433.04	610.20
C	Net Employee Expenses	312.26	516.34

Repairs & Maintenance Expenses (R&M)

- 3.7.4. The Petitioner has considered the same methodology approved by the Hon'ble Commission in the Tariff Order for FY 2021-22, for the APR of Normative R&M expenses for FY 2021-22. The base year value is considered as true-up value claimed for FY 2020-21. The computation for FY 2021-22 is shown below.

Table 3-11 R&M Expenses for FY 2021-22

Particulars	Claimed in Instant Petition for FY 2020- 21	Average WPI Escalation of last 3 years.	Computed (Rs. Cr)
R&M Expenses	378.23	2.42%	387.37

- 3.7.5. Further it is pertinent to highlight that Hon'ble Commission vide Tariff Order dated 29.07.2021 approved Special R&M of Rs. 180.70 Cr. It is hereby submitted that Petitioner has prepared software for compliance of UPERC SOP Regulations, 2019 and making required arrangements. These expenditures fall in various heads under O&M Expenses and the same shall be allowed. Actual claim will be submitted during the True-up of FY 2021-22.
- 3.7.6. Net normative R&M expenses details for FY 2021-22 is shown in the Table below:

Table 3-12 Normative R&M Expenses for FY 2021-22

SI No.	Particulars	Approved in T.O 29.7.2021	Normative
1	Gross R&M Expenses after escalation	361.38	387.37
2	Less: R&M Expenses capitalized	-	-
3	Special R&M	180.70	180.70
4	Net R&M Expenses	542.08	568.07

Administrative and General Expense (A&G)

- 3.7.7. The Petitioner has considered the same methodology approved by the Hon'ble Commission in the Tariff Order for FY 2021-22, for the APR of Normative R&M expenses for FY 2021-22. The base year value is considered as true-up value claimed for FY 2020-21. The computation for FY 2021-22 is shown below.

Table 3-13 Computed A&G Expenses for FY 2021-22

Particulars	Claimed in Instant Petition for FY 2020-21	Average WPI Escalation of last 3 years.	Computed (Rs. Cr)
A&G Expenses	315.21	2.42%	322.82

- 3.7.8. Normative Administrative and General expenses details for FY 2021-22 has been shown in the Table below:

Table 3-14 Normative A&G Expenses for FY 2021-22

SI No.	Particulars	Approved in T.O 29.7.2021	Normative
1	Gross A&G Expenses after escalation	259.48	322.82
2	Less: A&G expenses capitalized	-	-
3	Net A&G expenses	259.48	322.82

Smart Metering OPEX

- 3.7.9. The amount sought as 'Additional A&G Expenses for smart metering is payable to EESL to cover cost towards smart meter and box installation, AMI software cost, consumer indexing, training, integration and Commissioning of AMI solution. It may be noted that this cost has been proposed to be recovered under Opex model based on per meter per month basis and there shall be no additional burden of depreciation, interest and return on equity on the consumer.

- 3.7.10. The Hon'ble Commission in Tariff Order FY 2021-22 dt. 29.07.2021 at Clause no. 5.9.14 has stated that

"However, the Smart Meter Rollout scheme is OPEX model and not CAPEX model. With roll out of Smart Meters, the billing and collection efficiency of Discoms will increase thereby reducing the commercial losses. It is expected that the overall O&M cost of the Discoms would also decrease due to improved billing & collection efficiency which would be compensated by the charges paid in OPEX model. Hence the same cannot be allowed as additional O&M expense."

- 3.7.11. The smart meter roll-out plan on Opex model was submitted to the Hon'ble Commission wellbefore its implementation. The Hon'ble Commission while approving the roll-out plan neverstated that the cost envisaged under the Opex model would not be allowed to be passed on inthe ARR. Moreover, the Hon'ble Commission in its Tariff Order dated 03.09.2019 stated thatit will carry out detailed analysis of the additional O&M expenses (on account of implementation of smart meter roll out plan) for ensuing years at the time of truing-up.

- 3.7.12. Therefore, the Hon'ble Commission is requested to allow the smart meter Opex estimated bythe Petitioner for FY 2021-22:

Table 3-15 Smart metering OPEX for FY 2021-22

Particulars	Smart Meters installed till March 2021	Smart Meters to be installed till March 2022	Rate (Rs. /meter/month including GST @18%)	OPEX (Rs. Crore)
FY 2021-22	3,75,849	3,75,849	101.42	45.74

3.7.13. The Hon'ble Commission is requested to approve the same.

3.7.14. Further, it is also important to mention here that Smart metering OPEX was not covered under the A&G Expense head in the past and therefore, shall be allowed in full, over and above the usual A&G Expenses proposed by the Petitioner.

3.7.15. Based on the above submission, the summary of the Operation & Maintenance expenses (O&M) approved in the Tariff Order for FY 2021-22 vis-a-vis the O&M expenses claimed are shown in the table below:

Table 3-16 Operation & Maintenance Expenses for FY 2021-22 (Rs. Crore)

Particulars	Approved in T.O. dt. 29.07.2021	Revised Estimate
Repair & Maintenance expenses	361.38	387.37
Employee expenses	745.30	1,126.54
Administrative and General expenses	259.48	322.82
Gross O&M Expenses	1,366.16	1,836.74
Less:		
Employee expenses capitalized	433.04	610.20
Administrative and General expenses capitalized	-	-
Gross expenses Capitalized	433.04	610.20
Smart Meter Opex		45.74
Net O&M Expenses	933.12	1,272.28

3.7.16. The Petitioner requests the Hon'ble Commission to allow O&M expenses as shown in the above Table.

3.8. Capital Investment, Capitalisation and Financing

3.8.1. Revised details of the capex schemes (submitted in the MYT Formats) are shown in the Table below.

Table 3-17 Capex for FY 2021-22 (Rs Crore)

Particulars	Investments	Capitalisation
Other Schemes (net of Consumer Contribution and Grant)	410.35	1924.61
ADB (net of Consumer Contribution and Grant)	123.73	49.49
Investments during the year (A)	534.08	1,974.10
Add: Employee Capitalization (B)	610.20	610.20

Particulars	Investments	Capitalisation
Add: Interest Capitalization (C)	172.24	172.24
Total (D= A+B+C)	1,316.52	2,756.54

- 3.8.2. It is pertinent to highlight that the Investment considered for FY 2021-22 is the net investments (excluding grants and consumer contributions). This investment is funded only by debt and equity portion. The Petitioner has separately provided the amount of consumer contribution and grant for FY 2021-22 in relevant section of this petition and in tariff formats as well.
- 3.8.3. Based on the methodology adopted by Hon'ble Commission, 40% of the investments made during FY 2021-22 is capitalized in the same year. The Petitioner has also considered employee expense capitalization and Interest capitalization during FY 2021-22 as per the methodology adopted by Hon'ble Commission. Considering the Capital Work in Progress (CWIP), investment during the year and capitalisations, the Petitioner has computed the closing CWIP for FY 2021-22. The details are provided in the table below:

Table 3-18 Capital Investment in FY 2021-22 (Rs Crore)

Particulars	Derivation	Approved in T.O. dt. 29.07.2021	Revised Estimates
Opening WIP as on 1st April	A	5,404.46	4,401.18
Investments	B	1,859.22	534.08
Employee Expenses capitalization	C	433.04	610.20
A&G Expenses Capitalisation	D	-	-
Interest Capitalisation on Interest on long term loans	E	93.91	171.48
Total Investments	F= A+B+C+D+E	7,790.63	5,716.93
Transferred to GFA (Total Capitalisation)	G	3432.42	2755.78
Closing WIP	H=F-G	4,358.21	2,961.16

- 3.8.4. The Table below summarises the amounts received towards consumer contributions, capital grants and subsidies in FY 2021-22:

Table 3-19 Consumer Contributions, Capital Grants and Subsidies in FY 2021-22 (Rs. Crore)

Particulars	Approved in T.O. dt. 29.07.2021	Revised Estimates
Opening Balance of Consumer Contributions, Grants and Subsidies towards Cost of Capital Assets	6,478.10	5,547.48
Additions during the year includes consumer contribution and grants	1,448.88	-
Less: Amortisation on consumer contribution part only	88.83	137.36
Closing Balance	7,838.15	5,410.12

- 3.8.5. As discussed in above tables, the capital investment eligible for financing after deducting consumer contribution and grant is shown in the table below. The Petitioner has considered the same approach as in previous Orders and therefore, considered the funding of capitalisation (Asset put to use) in the ratio of 70:30. Considering this approach, 70% of the

Capitalisation (Asset put to use) undertaken during the year has been financed through loan and balance 30% has been financed through equity contributions.

Table 3-20 Financing of the Capital Investments in FY 2021-22 (Rs. Crore)

Particulars	Derivation	Revised Estimates
Investment / Capitalisation (Asset put to use) net of CCG	A	2756.54
Less:		
Consumer Contribution and Grants	B	-
Investment funded by debt and equity	D=A-B	2,756.54
Debt Funded	70% of D	1,929.58
Equity Funded	30% of D	826.96

3.9. Interest & Finance Charges

Interest on Long Term Loan

- 3.9.1. The Hon'ble Commission in its previous Tariff and True-Up orders had considered a normative tariff approach with a debt equity ratio of 70:30. Considering this approach, 70% of the capitalisation undertaken in any year was financed through loan and balance 30% has been financed through equity contributions. The portion of capital expenditure financed through consumer contributions, capital subsidies and grants are separated and the depreciation, interest and return on equity thereon was not charged to the consumers. Subsequently, the financing of the capital investment was worked out based on the debt equity ratio of 70:30 and net allowable depreciation was considered as normative loan repayment.
- 3.9.2. The Petitioner has worked-out the interest on long term loan based on the same philosophy.
- 3.9.3. The opening balance of long term loan has been considered equivalent to the closing loan balance for FY 2020-21 as per the present petition.
- 3.9.4. Net Allowable depreciation for the year has been considered as normative loan repayment. The actual weighted average rate for FY 2020-21 (details are submitted in Format F 31 of the MYT Tariff Formats) has been considered for computing the eligible interest expenses.
- 3.9.5. Considering the above, the interest on long term loan has been computed below. The computations for interest on long term loan are shown in table below:

Table 3-21 Allowable Interest on Long Term Loan for FY 2021-22 (Rs. Crore)

Particulars	Approved in T.O. dt. 29.07.2021	Revised Estimates
Opening Loan	3,394.28	6,370.12
Loan Additions (70% of Capitalisation)	1,518.30	1,929.58
Less: Repayments (Depreciation allowable for the year)	451.90	765.21
Closing Loan Balance	4,460.68	7,534.48
Weighted Average Rate of Interest	10.91%	10.91%
Interest on long term loan	428.65	758.50
Less: Interest Capitalized	93.91	172.24
Net Interest on Loan term loan	334.74	586.25

Interest on Consumer Security Deposits

- 3.9.6. The Petitioner has considered the consumer security deposit for FY 2020-21 as opening amount of consumer security deposit for FY 2021-22. To arrive at the closing amount of security deposit for FY 2021-22 the ratio of revenue assessment for current year (FY 2021-22) and previous year (FY 2020-21) is multiplied with consumer security deposit as per the books of accounts for FY 2020-21.
- 3.9.7. The interest on consumer security deposit is calculated on average amount of consumer security deposit and at the rate of RBI as on 1st April 2021.
- 3.9.8. The Petitioner requests the Hon'ble Commission to consider the Interest on Security Deposit for APR of FY 2021-22, which has been computed at RBI interest rate of 4.25 % as on 1st April 2021. The normative interest on consumer security deposit approved by the Hon'ble Commission in Tariff Order for FY 2021-22 vis-a-vis the estimated consumer security deposit is shown in table below:

Table 3-22 Interest on Security deposit for FY 2021-22 (Rs Crore)

Particulars	Approved in T.O. dt. 29.07.2021	Revised estimates
Closing Balance for Security Deposit	745.30	673.45
Rate of Interest (RBI bank Rate as on 01.04.2021)		4.25%
Interest on Security Deposits	34.66	28.66

Bank and Finance Charges

- 3.9.9. The Petitioner humbly submits that the banks and finance charges are legitimate charges and therefore for the estimation purpose the petitioner has considered the same value for FY 2021-22 as recorded in the account FY 2020-21. It has been considered as below:

Table 3-23 Bank and Finance Charges as per audited accounts FY 2021-22 (Rs. Crore)

Particulars	Revised estimates
Bank and Finance Charges	47.43

3.10. Interest on Working Capital

- 3.10.1. The Petitioner worked-out interest on working capital for FY 2021-22 as per Regulation 25 of the Multi Year Tariff Distribution Regulations, 2019. The Regulation 25 is quoted below:

“(a) The working capital requirement of the Distribution Business shall cover:
(i) Operation and maintenance expenses for one month;
(ii) Maintenance spares at 40% of the R&M expenses for two months; and
(iii) One and half month equivalent of the expected revenue from charges Distribution system at the prevailing Tariff (excluding Electricity Duty);

Minus

(iv) Amount held as security deposits from Distribution System Users:

Provided that for the purpose of Truing-Up for any year, the working capital requirement shall be re-computed on the basis of the values of components of working capital approved by the Commission in the Truing- Up;

(b) Rate of interest on working capital shall be simple interest and shall be equal to the SBI MCLR (1 Year) on October 01, 2019 plus 250 basis points:

Provided that for the purpose of Truing-Up for any year, simple interest on working capital shall be allowed at a rate equal to the weighted average SBI MCLR (1 Year) prevailing during the concerned Year plus 250 basis points.”

- 3.10.2. The detailed working of Interest on Working Capital for FY 2021-22 is shown in table below:

Table 3-24 Interest on Working Capital for FY 2021-22 (Rs. Crore)

Particulars	Approved in T.O. dt. 29.07.2021	Revised Estimates
O&M expenses for 1 month	92.82	117.27
One and Half month equivalent of expected revenue	1,548.68	1,928.15
Maintenance spares @ 40% of R&M expenses for two months	36.14	37.87
Less: Security deposits from consumers, if any	745.30	673.45
Total Working Capital Requirement	932.33	1,409.84
State Bank Advance Rate (SBAR) % as on 1 st Oct 2019 Plus 250 bp	10.65%	10.65%
Interest on Working Capital	99.29	150.15

- 3.10.3. The following table summarises the Interest and Finance charges claimed by the Petitioner as against those approved by the Hon’ble Commission in the Tariff Order for FY 2021-22.

Table 3-25 Interest and Finance Charges for FY 2021-22 (Rs. Crore)

Particulars	Approved in T.O. dt. 29.07.2021	Revised Estimates
A: Interest on Long Term Loans		
Gross Interest on Long Term Loan	428.65	758.50
Less: Interest Capitalisation	93.91	172.24
Net Interest on Long Term Loans	334.74	586.25
B: Finance and Other Charges		

Particulars	Approved in T.O. dt. 29.07.2021	Revised Estimates
Interest on Consumer Security Deposits	34.66	28.66
Bank/ Finance Charges		47.43
Total Finance Charges	34.66	76.09
C: Interest on Working Capital	99.29	150.15
Total (A+B+C)	468.69	812.49

3.10.1. The Petitioner has computed the allowable depreciation expense on the GFA base for FY 2021-22 and at the rates approved by the Hon'ble Commission in MYT Distribution Regulations, 2019. The Petitioner has computed the depreciation only on the depreciable asset base and has excluded the non-depreciable assets such as land, land rights, etc. Further, the Petitioner has reduced the depreciation/amortization on assets created out of consumer contributions, capital grants and subsidies from allowable depreciation for FY 2021-22. Moreover, the depreciation has been calculated in two parts (Part A & B) for the asset blocks depreciated before 01.04.2020 and asset blocks depreciated as on 01.02.2020 as per the SLM methodology prescribed in MYT Regulations, 2019. The addition to GFA is considered in Part B and the same is considered net of Consumer contribution and grants. Considering this philosophy, the gross entitlement towards depreciation has been computed as shown in the Tables below:

Table 3-26 Gross Allowable Depreciation for assets before 01.04.2020 of MVVNL for FY 2021-22 (Rs. Crore) PART A

GROSS ALLOWABLE DEPRECIATION FOR ASSETS BEFORE 01.04.2020 OF MVVNL FOR FY 2021-22 (RS. CRORE) PART A								
Sr. No	Particulars	Opening GFA (as on 31.3.2021)	Cumulative Depreciation	Deduction to GFA	Closing GFA	Average GFA	Depreciation Rate	Allowable Gross Depreciation
1	Land & Land Rights	1.00	-		1.00	1.00	0.00%	-
2	Buildings	193.03	54.75		193.03	193.03	3.34%	6.45
3	Other Civil Works	13.30	3.77		13.30	13.30	3.34%	0.44
4	Plant & Machinery	2,984.67	1,112.82		2,984.67	2,984.67	5.28%	157.59
5	Lines, Cables, Network etc.	8,728.42	2,648.00		8,728.42	8,728.42	5.28%	460.86
6	Vehicles	5.64	1.77		5.64	5.64	6.33%	0.36
7	Furniture & Fixtures	11.28	3.53		11.28	11.28	6.33%	0.71
8	Office Equipments	95.40	29.87		95.40	95.40	6.33%	6.04
9	Capital Expenditure on Assets not belonging to utility	-	-		-	0.00		-
10	Total Fixed Assets	12,032.74	3,854.50		12,032.74	12,032.74	5.26%	632.45
11	Non depreciable assets (Land & Land Rights)	1.00	-		-			
12	Depreciable assets	12,031.74	3,854.50		12,032.74	0.00		

Table 3-27 Gross Allowable Depreciation for assets on 01.04.2020 of MVVNL for FY 2021-22 (Rs. Crore) PART B

GROSS ALLOWABLE DEPRECIATION FOR ASSETS AS ON 01.04.2020 OF MVVNL FOR FY 2021-22 (RS. CRORE) PART B							
S.No.	Particulars	Opening GFA as on 01.04.2021	Addition to GFA	Closing GFA	Average GFA	Depreciation Rate	Allowable Gross Depreciation
1	Land & Land Rights	0.31	0.23	0.54	0.43	0.00%	0.00
2	Buildings	60.33	44.22	104.56	82.45	3.34%	2.75
3	Other Civil Works	4.16	3.05	7.20	5.68	3.34%	0.19
4	Plant & Machinery	932.89	683.75	1,616.64	1,274.77	5.28%	67.31
5	Lines, Cables, Network etc.	2,728.16	1,999.57	4,727.73	3,727.95	5.28%	196.84
6	Vehicles	1.76	1.29	3.05	2.41	6.33%	0.15
7	Furniture & Fixtures	3.52	2.58	6.11	4.82	6.33%	0.30
8	Office Equipments	29.82	21.85	51.67	40.74	6.33%	2.58
9	Capital Expenditure on Assets not belonging to utility	-	-	0.00			
10	Total Fixed Assets	3,760.97	2,756.54	6,517.51	5,139.24		270.12
11	Non depreciable assets (Land & Land Rights)	0.31	0.23	0.54	0.43		0
12	Depreciable assets	3,760.65	2,756.31	6,516.97	5,138.81	5.26%	270.12

3.11. Depreciation

- 3.11.1. Accordingly, the depreciation as approved by the Hon'ble Commission in its Tariff Order dated 29.07.2021 and Revised Estimates as computed above is shown as under:

Table 3-28 Net Allowable Depreciation for FY 2021-22 (Rs. Crore)

Particulars	Approved in T.O. dt. 29.07.2021	Revised Estimates
Gross Allowable Depreciation	507.69	902.58
Less: Equivalent amount of depreciation on assets acquired out of the Consumer Contribution and GoUP Subsidy	55.79	137.36
Net Allowable Depreciation	451.90	765.21

3.12. Provision for Bad and Doubtful Debts

- 3.12.1. The Regulation 46 of the MYT Distribution Regulations, 2019 provides for expenses under bad and doubtful Debts to the extent of 2% of the revenue receivables as specified below:

“46.1 For any Year, the Commission may allow a provision for write off of bad and doubtful debts upto 2% of the amount shown as Revenue Receivables from sale of electricity in the audited accounts of the Distribution Licensee for that Year or the actual write off of bad debts, whichever is less:”

- 3.12.2 The Petitioner has computed bad and doubtful debts at 2% of the revenue receivables as per audited accounts of FY 2021-22.

Table 3-29 Allowable Provision for Bad and Doubtful Debts for FY 2021-22 (Rs Crore)

Particulars	Approved in T.O. dt. 29.07.2021	Revised Estimates
Total Revenue Receivables from Retail Sales	12389.41	12,635.00
% of Provision for Bad and Doubtful Debts	1.68%	2%
Bad and Doubtful Debts as per Regulation	139.68	252.70
Bad Debt Claimed		252.70

3.13. Return on Equity

- 3.13.1. The Regulation 22 of the Distribution MYT Regulations, 2019 provides for return on equity @15% as specified below:

“22.1 Return on equity shall be computed in Rs. terms on equity base at the rate of 14.5% post-tax per annum for the Transmission Licensee and at the rate of 15% post-tax per annum for Distribution Licensee respectively as determined in accordance with Regulation 20.

Provided that assets funded by Consumer Contribution / Deposit works, Capital Subsidies /- Grants and corresponding Depreciation shall not form part of the Capital Cost. Actual Equity infused by the Licensee as per book value shall be considered and shall be used for computation in these Regulations.”

The Petitioner has considered closing equity in true up FY 2020-21 as opening for FY 2021-22. Equity addition during the year has been considered 30% of Capitalisation (Asset put to use) during the year net of consumer contribution, capital subsidies/ grants.

3.13.2. The Return on Equity (RoE) for FY 2021-22 is shown below:

Table 3-30 Return on Equity (RoE) for FY 2021-22 (Rs Crore)

Particulars	Approved in T.O. dt. 29.07.2021	Revised Estimates
Opening Equity	2,970.51	3,336.88
Net additions during the year	1,029.73	826.96
Less: Consumer Contribution	-	-
Less: Grants	379.03	-
Equity (Closing Balance)	3,621.21	4,163.84
Rate of Return on Equity (%)	15.00%	15%
Allowable Return on Equity	494.38	562.55

3.14. Revenue from Sale of Power

3.14.1. The Petitioner has estimated the revenue for FY 2021-22 to Rs. 12,635 Crores from the sale of 20,586 MUs.

3.15. Non-Tariff Income

3.15.1. The Hon'ble Commission has approved non-tariff income in the Tariff Order for FY 2021-22 dated 29.07.2021, the Petitioner has revised estimates based on the account of FY 2020-21 for the non-tariff incomes for FY 2021-22 as shown below:

Table 3-31 Non- Tariff income for FY 2021-22 (Rs Crore)

Particulars	Approved in T.O. dt. 29.07.2021	Revised Estimates
Total	34.73	38.06

3.15.2. It is prayed to Hon'ble Commission to approve the Non-Tariff Income as claimed by petitioner.

3.16. GoUP Subsidy

Table 3-32 Details of approved GoUP subsidy

Consumer Category	Subsidy/unit as per GoUP directions	Total Subsidy
LMV-1 Domestic Light, Fan & Power		
Particulars	Rs./Unit	Rs. Cr
Life Line Consumer	Rs.3.25/kWh	483
Rural Unmetered	Rs. 365 / kW / month	743
Rural Metered		
0-100 Unit	Rs. 2.45/kW	3,448
101-150 Unit	Rs. 2.00/kW	778
LMV- 5 Rural Schedule only		
	Rs./ BHP/month	Rs. Cr
Consumer getting supply as per Rural Schedule (unmetered)	490.00	6198
Consumer getting supply as per Rural Schedule (metered)		
Total Subsidy		11,650

- 3.16.1. GoUP has communicated the subsidy rates to Hon'ble Commission vide letter number 883/24-1-21-1307/2020 dated 13/05/2021 as mentioned in table above for FY 2021-22.
- 3.16.2. The impact of GoUP subsidy on cross-subsidy percentage (%) among various categories/sub-categories/slabs is demonstrated in the following table, as per the estimated APR data for FY 2021-22 and per unit rate.

Table 3-33 Impact of GoUP subsidy in cross subsidy %

Consumer Category/ Sub- Category/ Slab	ABR (Rs./unit) As approved for FY 22	GoUP Subsidy (Rs./Unit) or (Rs./bhp /month)	Sales (MU) As approved for FY 22	Load (kW) As approved for FY 22	Computed Revenue from Subsidy (Rs. Cr.)	ABR (without Govt. Subsidy, as per GoUP Directions)	Cross Subsidy	
							Approved in Tariff Order for FY 21-22	As per computed ABR (at full cost tariff)
	A	B				C=A+B		
CONSUMER CATEGORY / SUB-CATEGORY/Slab								
LMV-1 DOMESTIC LIGHT, FAN & POWER:								
(a) Consumers getting supply as per 'Rural Schedule'	4.78					4.78		
(i) Lifeline Consumers: With contracted load of 1.00 kW, Energy consumption upto 100 kWh/ month	3.73	3.25	1533.47	19,16,121	498.38	6.88	-50.46%	-8.69%
(ii) Un-Metered:						-		
(iii) Metered: (Dom: Rural Schedule (metered) other than BPL)	4.85					4.85	-35.68%	-35.68%
Upto 100 kWh / Month	4.05	2.45	4,077.77	93,71,452	999.05	6.93	-46.24%	-8.05%
101-150 kWh / Month	5.47	2.00	3,887.79	59,49,481	777.56	7.82	-27.48%	3.73%

Consumer Category/ Sub- Category/ Slab	ABR (Rs./unit) As approved for FY 22	GoUP Subsidy (Rs./Unit) or (Rs./bhp /month)	Sales (MU) As approved for FY 22	Load (kW) As approved for FY 22	Computed Revenue from Subsidy (Rs. Cr.)	ABR (without Govt. Subsidy, as per GoUP Directions)	Cross Subsidy	
							Approved in Tariff Order for FY 21-22	As per computed ABR (at full cost tariff)
151-300 kWh / Month	6.23					6.23	-17.33%	-17.33%
301-500 kWh / Month	6.68					6.68	-11.44%	-11.44%
Above 500 kWh / Month	7.65					7.65	1.43%	1.43%
						-		
(b) Supply at single point for bulk loads (50 kW and above, Supplied at any voltage):	7.26					7.26	-3.73%	-3.73%
Deemed Franchisee of the Licensee should not charge more than 5% additional charge on the above specified rate.						-		
(c) Other Metered Domestic Consumers:	6.98					6.98	-7.49%	-7.49%
(i) Other Metered Domestic Consumers other than BPL						-		
Upto150 kWh / month	6.51					6.51		
151-300 kWh / month	7.16					7.16		
301- 500 kWh / month	7.9					7.9		
Above 500 kWh / month	8.33					8.33		
Sub Total LMV-1	5.79					5.79	-23.17%	-7.50%
						-		
LMV-5 SMALL POWER FOR PRIVATE TUBE WELL/ PUMPING SETS FOR IRRIGATION PURPOSES:						-		
(a) Consumers getting supply as per "Rural Schedule"	1.25					5.68		
(i) Un-Metered Supply	1.22	Rs.490 /bhp/month	13,527.06	76,71,150	6,048.76	5.65	-83.78%	-25.09%
Rural Schedule	1.22					1.22		
Rural Schedule Pumps	-					4.43		
(ii) Metered Supply	2.54	Rs.490 /bhp/month	479	2,70,556	213.34	6.97	-66.32%	-7.63%
Rural Schedule	2.54					2.54		
Rural Schedule Pumps	-					-		
(iii) Energy Efficient Pumps	-					-		
(b) Consumers getting supply as per "Urban Schedule (Metered Supply)"	6.78					6.78	-10.04%	-10.04%
Sub Total LMV-5	1.32					5.75	-82.52%	-23.83%
Total Subsidy					8,537.09			

3.16.3. The difference in the amount of GoUP Subsidy computed in above table with the amount communicated by GoUP to the Hon'ble Commission may be due to unavailability of unmetered consumers in approved data and some other factors considered by Hon'ble Commission while finalizing the tariff order dated 29.07.2021. It is to be further submitted that the budgeted amount of subsidy received from GoUP is Rs. 14,500 Cr. for FY 2021-22 and the additional amount received may be adjusted from the overall revenue gap. Further the same has been allocated among Discoms on the basis of load of the relevant category/subcategory for

unmetered categories and on the basis of sales for metered category. Further, It is submitted that Government Subsidy is not the part of expenditure and is part of revenue only.

3.16.4. The Petitioner estimates Rs. 2790 Crore revenue subsidy from GoUP.

Table 3-34 GoUP Subsidy for FY 2021-22 (Rs. Crore)

Particulars	Approved in T.O. dt. 29.07.2021	Revised Estimate
MVVNL	2,365.16	2,790.21

3.16.5. It is further submitted that The Hon'ble Commission in its Tariff order for FY 2021-22 has also recognised the Government subsidy component of LMV-5 Metered Rural Consumers as per the GoUP direction, as under:

8.1.12 Further, the Commission is in receipt of a GoUP letter with Ref: 707/24-P-1/2021 dated 25.3.2021 under Section 108 of EA 2003, wherein GoUP mentioned that since majority of the rural LMV-5 consumers are unmetered, and taking into consideration the impact of Covid pandemic, GoUP has decided that tariff rates of rural LMV-5 unmetered consumers may be levied on LMV-5 metered consumers tariff and has directed the Commission to consider the same.

8.1.13 Subsequently, GoUP again sent a letter with Ref: 812/24-1-21-1307/2020 dated 12.5.2021 for billing LMV-5 rural metered as unmetered, however metering of unmetered consumers will also be done and the meter reading will be used for the purpose of energy accounting and subsidy computation. The difference between the revenue at unmetered rates & revenue as per metered energy & rates, would be provided to the Licensees by GoUP.

*8.1.14 Although, this provision is not in conformity of Section 65 of Electricity Act, 2003, in regard to advance subsidy, however, in view of the State Government's commitment to provide additional subsidy in regards to the above arrangement, **the Commission accepts this proposal and the additional subsidy amount, which will be computed at the time of True-up shall be payable by the State Government in conformity to Section 65 of Electricity Act, 2003.***

3.16.6. In this regard, the petitioner submits that the Hon'ble Commission may kindly recognise this GoUP subsidy component separately.

3.17. Annual Performance Review (APR) for FY 2021-22

3.17.1. The Annual Performance Review (APR) for FY 2021-22 is summarised in the table below:

Table 3-35 Annual Performance Review (APR) for FY 2021-22 (Rs Crore)

Sr. No.	Particular	FY 2021-22	
		Approved in T.O	Revised Estimates
1.	Power Purchase Expenses (including PGCIL charges)	11,530.48	11,810.85
2.	Transmission Charges	514.28	616.72
3.	Total O&M expenses net of capitalization	1,113.82	1,452.98
4.	Interest and Finance charges	468.69	812.49
5.	Depreciation	451.90	765.21
6.	Bad and Doubtful Debts	139.68	252.70
7.	Add: Return on Equity	494.38	562.55
8.	Gross Expenditure	14,713.23	16,273.51
9.	Less: Non-tariff Incomes	34.73	38.06

Sr. No.	Particular	FY 2021-22	
		Approved in T.O	Revised Estimates
10.	Net Annual Revenue Requirement	14,678.50	16,235.45
11.	Revenue from Tariff incl DPS	12,389.41	12,635.00
12.	Revenue from Cross-subsidy (Short-term open access consumers)	-	-
13.	Total Revenue	12,389.41	12,635.00
14.	Revenue (Gap)/Surplus before Subsidy	(2,289.09)	(3,600.44)
15.	GoUP Subsidy	2,365.16	2,790.21
16.	Net Revenue (Gap)/Surplus	76.07	(810.23)

3.17.2. The Petitioner requests to approve the revised estimates of the ARR claim/Revenue Gap for FY 2021-22 in above Table.

4. Aggregate Revenue Requirement (ARR) for FY 2022-23

4.1. Consumption parameters: Consumer numbers, Connected load, Sales

- 4.1.1. For the purpose of projection of billing determinants (Consumer numbers, connected load and Sales), the distribution licensee has analysed category-wise and sub-category wise data of the sale of electricity, number of consumers, connected / contracted load, etc. of the preceding seven years i.e. from FY 2013-14 to FY 2019-20.
- 4.1.2. The approach being followed is to analyse 7-year, 6-year, 5-year, 4-year, 3-year, 2-year Compound Annual Growth Rates (CAGRs) and year on year growth rate of each sub-category for appropriate projection of billing determinants. The Petitioner has considered the FY 2020-21 billing determinants as a base year for the purpose of computation of billing determinants of FY 2022-23. The Licensee has made effort to focus on reasonable growth for FY 2022-23 making required corrections in the projections of earlier years.
- 4.1.3. It is informed that under the Saubhagya Yojana, the Petitioner has added substantial number of Lifeline consumers at LT network. These consumers are small consumers which are qualified under tariff sub-category "Lifeline consumers". Such consumers have been migrated to IT billing system resulting in change in sub-categories/slabs based on contracted load and energy consumed. This has resulted in significant variation in corresponding sub-category/slabs. These consumers are small consumers which are qualified under tariff sub-category "Lifeline consumers". The consumers which are flagged under different LMV-1 sub-categories are now readjusted under LMV-1 category as per their consumption pattern. The consumers having 1 kW load and consumption upto 100 units are covered in Life line category and any change in this criteria will result in change of sub category / slab of such consumers. This is a dynamic situation which may keep on changing on monthly basis. However, the overall number of consumers within the category show normalized growth.
- 4.1.4. The Category-wise billing determinants as projected by the Petitioner for FY 2022-23 is shown in the Table below:

Table 4-1: Billing Determinants projected as per existing tariff structure for FY 2022-23

Consumer Category/ Sub-Category	Consumers	Load (kW)	Projected Sales (MU)
LMV-1: Domestic Light, Fan & Power			
Life Line Consumers (both Rural and Urban) (up to 100 kWh/month)	5,082,240	5,002,874.99	5,537.49
Dom: Rural Schedule (unmetered)	98,926	98,508.83	255.33
Dom: Rural Schedule (metered) other than BPL	787,918	840,880.63	921.32
0-100 kWh/month	488,876	457,439.06	226.51
101-150 kWh/month	196,417	176,584.93	325.53
151-300 kWh/month	61,426	161,088.35	152.10
301-500 kWh/month	37,212	42,044.03	183.65
Above 500 kWh/Month (starting from 501 unit)	3,987	3,724.26	33.53

Consumer Category/ Sub-Category	Consumers	Load (kW)	Projected Sales (MU)
Dom: Supply at Single Point for Bulk Load	93	37,081.35	62.81
Other Metered Domestic Consumers other than BPL	2,162,717	4,420,197.39	5,193.54
0-150 kWh/month	1,306,401	2,519,512.51	1,739.94
151-300 kWh/month	404,898	972,443.43	941.97
301-500 kWh/month	289,377	884,039.48	1,400.89
Above 500 kWh/Month (starting from 501 unit)	162,040	44,201.97	1,110.74
Sub Total	8,131,895	10,399,543.19	11,970.49
LMV-2: Non Domestic Light, Fan & Power	-	-	-
Non Dom: Rural Schedule (unmetered)	-	-	-
Non Dom: Rural Schedule (metered)	66,520	232,681.00	455.26
Non Dom: Private Advertising /Sign Post/Sign Board/GlowSign	6	10.30	5.60
Non Dom: Other Metered Non-Domestic Supply	344,286	906,034.94	1,264.06
Load upto 2 kW	223,786	398,655.37	568.83
Upto 300 kWh / month	168,958	300,984.81	273.04
301 – 1000 kWh / month	53,709	95,677.29	278.73
Above 1000 kWh/Month	1,119	1,993.28	17.06
Above 2 kW to 4 kW	86,071	244,629.43	391.86
Upto 300 kWh / month	64,554	183,472.08	195.93
301 – 1000 kWh / month	19,796	56,264.77	164.58
Above 1000 kWh/Month	1,721	4,892.59	31.35
Above 4 kW	34,429	262,750.13	303.37
Upto 300 kWh / month	20,657	118,237.56	78.88
301 – 1000 kWh / month	10,329	73,570.04	97.08
Above 1000 kWh/Month	3,443	70,942.54	127.42
Sub Total	410,812	1,138,726.24	1,724.93
LMV-3: Public Lamps	-	-	-
Unmetered	182	6,468.50	22.65
Unmetered - Gram Panchayat	119	1,699.50	5.92
Unmetered - Nagar Palika & Nagar Panchayat	55	3,972.25	12.06
Unmetered - Nagar Nigam	8	796.75	4.67
Metered	1,103	120,103.10	308.19
Metered - Gram Panchayat	81	1,012.04	1.44
Metered - Nagar Palika & Nagar Panchayat	707	28,205.54	76.35
Metered - Nagar Nigam	315	90,885.52	230.39
Sub Total	1,284	126,571.60	330.84
LMV-4: Light, fan & Power for Institutions	-	-	-
Inst: Public	24,979	120,169.96	214.23

Consumer Category/ Sub-Category	Consumers	Load (kW)	Projected Sales (MU)
Inst: Private	3,284	33,192.60	51.10
Sub Total	28,263	153,362.56	265.33
LMV-5: Private Tube Wells/ Pumping Sets	-	-	-
Consumers getting supply as per "Rural Schedule"	231,011	1,254,765.87	2,108.35
PTW: Rural Schedule (unmetered) (Total)	227,588	1,231,088.00	2,031.15
PTW: Rural Schedule (unmetered)	227,588	1,231,088.00	2,031.15
PTW: Rural Schedule (Energy Efficient Pumps) (Unmetered)	-	-	-
PTW: Rural Schedule (metered) (Total)	3,423	23,677.87	77.21
PTW: Rural Schedule (metered)	3,423	23,677.87	77.21
PTW: Rural Schedule (Energy Efficient Pumps) (metered)	-	-	-
Consumers getting supply as per "Urban Schedule (Metered Supply)"	6,025	27,014.19	84.88
PTW: Urban Schedule (metered)	6,025	27,014.19	84.88
Sub Total	237,037	1,281,780.06	2,193.23
LMV 6: Small and Medium Power upto 100 HP (75 kW)	-	-	-
Consumers getting supply as per "Rural Schedule"	10,137	112,350.37	138.72
<i>Up to 1000 kWh / month</i>	7,896	101,378.20	64.94
<i>Up to 2000 kWh / month</i>	1,914	6,934.52	28.63
<i>For above 2000 kWh / month</i>	327	4,037.65	45.15
Consumers getting supply other than "Rural Schedule"	29,296	314,075.60	356.17
<i>Up to 1000 kWh / month</i>	18,750	125,630.24	90.76
<i>Up to 2000 kWh / month</i>	7,052	78,518.90	108.99
<i>For above 2000 kWh / month</i>	3,494	109,926.46	156.42
Sub Total	39,433	426,425.97	494.89
LMV-7: Public Water Works	-	-	-
Consumers getting supply as per "Rural Schedule"	1,158	24,983.33	96.82
Rural Schedule: Jal Nigam	440	10,005.19	35.69
Rural Schedule: Jal Sansthan	267	6,189.65	27.04
Rural Schedule: Other PWWs	451	8,788.50	34.09
Consumers getting supply other than "Rural Schedule"	2,773	72,695.22	338.05
Urban Schedule: Jal Nigam	87	8,605.46	17.95
Urban Schedule: Jal Sansthan	1,099	50,469.77	258.44
Urban Schedule: Other PWWs	1,586	13,619.98	61.66
Sub Total	3,930	97,678.55	434.87
LMV-8: State Tube Wells & Pump Canals upto 100 HP	-	-	-

Consumer Category/ Sub-Category	Consumers	Load (kW)	Projected Sales (MU)
Metered	9,253	69,192.96	536.67
Metered STW	9,253	69,192.96	536.67
Unmetered	1,967	28,619.75	252.26
Unmetered:STW/Panch.Raj/WB/ID/P. Canals/LI upto 100 BHP	1,966	28,591.50	252.16
Unmetered: Laghu Dal Nahar above 100 BHP	1	28.25	0.10
Sub Total	11,220	97,812.71	788.93
LMV-9: Temporary Supply	-	-	-
Metered	6,609	20,841.66	22.11
Metered TS: Individual residential consumers	983	2,359.41	1.42
Metered TS: Others	5,626	18,482.25	20.69
Unmetered	3	3.00	0.54
Unmetered TS: Ceremonies	-	-	-
Unmetered TS: Temp shops	3	3.00	0.54
Sub Total	6,612	20,844.66	22.65
LMV-10: Departmental Employees	23,078	74,143.26	147.43
Sub Total	23,078	74,143.26	147.43
LMV-11: Electrical Vehicles	-	-	-
Multi Story Buildings	-	-	-
LMV-1b	-	-	-
HV-1b	-	-	-
Public Charging Station	22	3,820.63	3.94
LT	20	523.93	0.36
HT	2	3,296.70	3.58
Sub Total	22	3,820.63	3.94
HV-1: Non-Industrial Bulk Loads	-	-	-
Rural Schedule	42	58,240.24	778.24
Rural Schedule - Supply at 11 kV	38	28,727.55	774.76
Rural Schedule - Supply above 11 kV	4	29,512.68	3.48
Urban Schedule	1,368	833,268.66	38.25
Urban Schedule - Supply at 11 kV	1,362	833,268.66	34.51
Urban Schedule - Supply above 11 kV	5	-	3.74
Sub Total	1,410	891,508.90	816.49
Commercial Loads / Private Institutions / Non-Domestic Bulk Power with contracted Load 75 kW & above and getting supply at single point on 11 kV & above voltage level.	705	356,603.56	408.25
Supply at 11 kV	352	320,943.20	404.64
Supply above 11 kV	352	35,660.36	3.61

Consumer Category/ Sub-Category	Consumers	Load (kW)	Projected Sales (MU)
Public Institutions, Registered Societies, Residential Colonies / Townships, Residential Multi-Storied Buildings including Residential Multi-Storied Buildings with contracted load 75 kW & above and getting supply at Single Point on 11 kV & above voltage levels	705	534,905.34	408.25
Supply at 11 kV	599	427,924.27	404.64
Supply above 11 kV	106	106,981.07	3.61
Sub Total	1,410	891,508.90	816.49
HV-2: Large and Heavy Power above 100 BHP (75 kW)	-	-	-
HV2 Urban Schedule: Supply at 11 kV	1,933	583,841.29	1,170.07
HV2 Urban Schedule: Supply above 11 kV & upto 66 kV	39	61,074.47	170.14
HV2 Urban Schedule: Supply above 66 kV & upto 132 kV	14	44,904.96	39.31
HV2 Urban Schedule: Supply above 132 kV	2	15,086.93	36.61
HV2 Rural Schedule: Supply at 11 kV	393	153,032.25	305.19
Sub Total	2,380	857,939.89	1,721.34
HV-3: Railway Traction	-	-	-
HV3 Supply at and above 132 kV	-	-	-
HV3 Supply below 132 kV	-	-	-
HV3 For Metro traction	2	9,671.05	31.70
Sub Total	2	9,671.05	31.70
HV-4: Lift Irrigation & P. Canals above 100 BHP (75 kW)	-	-	-
HV4 Supply at 11kV	21	24,370.82	53.30
HV4 Supply above 11kV & upto 66kV	14	5,983.68	18.69
HV4 Supply above 66 kV & upto 132kV	-	-	-
Sub Total	35	30,354.50	71.99
Extra State Consumer	1	5,000.00	8.78
Bulk Supply Consumer	-	-	-
Grand Total	8,897,414	15,615,183.76	21,027.82

4.1.5. The Hon'ble Commission is requested to approve the billing determinants as submitted in the above table.

4.2. Distribution Loss

4.2.1. The Petitioner has discussed the approach for the Distribution loss trajectory in detail in True-up section for FY 2020-21 above. Accordingly, the Petitioner projects the following distribution loss for FY 2022-23.

Table 4-2 Distribution Loss (%) for FY 2022-23

Distribution Loss (%)	FY 2022-23	
	Approved in Business Plan Order	Projected
MVVNL	11.04%	17.21%

4.3. Energy Balance

- 4.3.1. The Energy Balance as approved by the Hon'ble Commission vis-à-vis normative Energy Balance for FY 2022-23 is shown in the Table below:

Table 4-3 Energy Balance for FY 2022-23

Particulars	Projected
Retail Sales (MU)	21,028
Distribution Losses (%)	17.21%
Energy at DISCOM Periphery for Retail Sales (MU)	25,399
Intra-State Transmission Losses %*	3.27%
Energy Available at State periphery for Transmission (MU)	26,258
Inter State Losses (MU)	338
Inter-State Transmission Losses % (% computed on Total input energy)	1.27%
Purchases Required & Billed Energy (MU)	26,596

* Considered based on UPPTCL MYT Tariff Petition filed before the UPERC.

4.4. Power Purchase Expense

- 4.4.1. UPPCL is procuring power on behalf of Discoms at consolidated level. Accordingly, the Power Purchase section represents the consolidated power purchase at UPPCL level. The consolidated energy balance (detailed Energy Balance with further break-up of inter-State energy has been submitted in Format F13L of MYT Formats) for FY 2022-23 is as follows: -

Table 4-4 Consolidated Energy Requirement for FY 2022-23

Particulars	Consolidated
Retail Sales (MU)	100,236.60
Distribution Losses (%)	17.05%
Energy at DISCOM Periphery for Retail Sales (MU)	120,833.32
Intra-State Transmission Losses %	3.27%
Energy Available at State periphery for Transmission (MU)	124,918.15
Inter State Losses (MU)	1,608.74
Inter-State Transmission Losses % (% computed on Total input energy)	1.27%
Purchases Required & Billed Energy (MU)	126,526.89

- 4.4.2. This power purchase requirement is primarily fulfilled through multiple sources, with whom UPPCL and Discoms have long-term tied-up allocated capacities. The main sources of power procurement are broadly categorised as under:

- a) State Generating Stations – UPRUVNL and UJVNL
- b) Central Generating Stations – NTPC, NHPC, NPCIL, THDC, SJVNL
- c) Independent Power Plants (IPPs) and Joint Ventures (JVs)
- d) Renewable Energy Generating Stations – Solar, Wind, Biomass, Bagasse, MSW, etc.

4.4.3. In addition to the above sources, UPPCL is also required to purchase power from short-term sources including power trading companies, Power Exchanges in case of shortfall from regular sources or to meet the deviation from estimated demand depending on the availability.

4.4.4. It is submitted that there are technical, regulatory and operational issues related to MOD preparation based on Merit Order Despatch and Optimization of Power Purchase Regulations, 2021. It has been further communicated that licensee cannot address these issues as these are in the domain of SLDC :-

- i. Actual allowable Power Purchase Cost is to be computed as per clause 16.2 Multi Year Tariff for Distribution and Transmission (First Amendment) Regulations, 2020 reproduced as under: -

(Power Purchase Cost) actual allowable for a particular month will be total of actual variable costs of all the applicable variable cost of power purchase sources by applying MOD upto the (Power Purchase Quantum) actual allowable for that particular month.

- ii. Hon'ble Commission in its computation has interpreted that computation of per unit variable cost shall be carried out plant wise from lowest to highest variable cost and thereafter the cut-off is to be applied as per actual allowable quantum for the month for these plants.

SLDC implements the MOD for each 15 minutes of 96 time blocks, each day on a real time basis, taking into account the following provisions of Merit Order Dispatch and Optimization of Power Purchase Regulations, 2021 related to various technical, regulatory and operational limits of generation and transmission system:

- (I) 2. (19) "Merit Order Dispatch (MOD)" means dispatch of generating stations to supply electricity in accordance with the merit order based on variable charges taking into account any technical, regulatory and operational limits of generation and transmission facilities.
- (II) 11. (1) The technical minimum for operation in respect of a coal fired/gas fired/ multi fuel based thermal generating unit connected to the STU shall be 55% of its installed capacity or as mentioned in the ISGS."

The scheduled power of SLDC is based on the lower variable cost taking into account technical, regulatory and operational limits of generation and transmission facilities, which shall have been considered for implementing Actual MOD as per MOD Regulations.

- iii. As per the regulatory framework, the above provisions of the Regulation for all the plants are essential to be considered, which cannot be considered when the MOD is re-applied monthly. As per the above provisions of the UPERC Merit Order Dispatch and Optimization of Power Purchase Regulations, 2021, it is the responsibility of SLDC to prepare MOD stack and schedule power considering all technical, regulatory and operational constraints, therefore, any clarification pertaining to MOD stack, schedule of power may be dealt with by SLDC only as per Regulatory provisions, MOD cannot be applied without complying above provisions of the Regulations. The relevant portion of the Regulation is reproduced below:-

5. (2) *The Distribution Licensee shall verify and submit the details of variable charges of all the Generating Stations/units from which they are procuring power for preparing MOD stack based on Variable Charges of (n-1)th month. In case the Variable Charges for (n-2)th month needs to be considered and submitted to SLDC for preparation of the MOD stack by 7th day and 22nd day of every month with intimation to the seller with whom it has the PPA.*

5. (3) *SLDC shall prepare the MOD stack by the 12th day of every month for the data it has received by 7th day of the month, which would be effective from the 16th day of the month till the last day of the month unless revised by SLDC. SLDC shall upload the fortnightly MOD stack on its website in the format given at Annexure-1 by 15:00 hours on 12th of every month.*

5. (4) *Similarly, SLDC shall prepare the MOD stack by the 27th day of every month for the data it has received by 22nd day of every month, which would be effective from the 1st day of every subsequent month till the 15th day of that month unless revised by SLDC. SLDC shall upload the fortnightly MOD stack on its website in the format given in Annexure-1 by 15:00 hours on the 27th of every month.*

As per the above provisions, SLDC is required to prepare the Stack twice in a month; thus, two separate MODs stacks are implemented in a particular month. For each MOD the generating plant qualifying under merit can be different.

Considering the facts mentioned above, the results of MOD implemented on the power purchase data being submitted with the Petition are not reflecting the true picture and should not be considered for fuel surcharge computation.

4.4.5. It is submitted that the power procurement from different sources is undertaken by adopting Merit Order Despatch (MoD) principle for optimal utilization of the available sources at least variable cost. For projection of availability, the entire power available from all the tied-up sources during the financial year to meet the demand have been considered. Thereafter, the MoD principle has been applied on the generating stations not having must-run status, on monthly basis to arrive at the projected power purchase for the month and accordingly the power purchase cost for the entire FY 2022-23 is computed. While full fixed (capacity) charges have been considered for all the generating stations, in respect of generating stations covered under MoD principles, the variable charges corresponding to the cheaper sources have been considered, whereas no variable charges have been considered in respect of energy not scheduled for power purchase.

4.4.6. Here, it is important to note that considering the capacity available and the demand projection on month-to-month basis, there is no power procurement scheduled from short-term sources, i.e. Traders or power exchange during FY 2022-23. This is due to the reason that the MoD principle has been applied on month on month basis. However, as the actual power is scheduled on 15-minute slot basis, there are bound to be deviation from the MoD, due to actual availability of long-term sources for these slots. Therefore, the actual power procurement from various sources is bound to vary accordingly. Further, as already discussed, there shall also be requirement to purchase power from short-term sources including power trading companies, Power Exchanges in case of shortfall from regular sources or to meet the deviation from estimated demand depending on the availability. Accordingly, the Hon'ble Commission is requested to consider actual power

purchase at the time of Truing-up and/or computation of Fuel Surcharge Rate, in accordance with the Regulations.

- 4.4.7. It is further submitted that the exchange or short-term power is being procured when the actual power procurement from various sources is vary, as the actual power is scheduled on 15-minute slot basis. Further, there shall also be requirement to purchase power from short-term sources including power trading companies, Power Exchanges in case of shortfall from regular sources or to meet the deviation from estimated demand depending on the availability.
- 4.4.8. In this regard to the short-term power purchase, it is respectfully submitted that demand is forecasted on hourly basis considering hourly historical data for each day. Considering utility in planning and procurement, Monthly Demand Characteristic Curve with hourly resolution, representing Average Demand for the respective hour for the entire month, is forecasted. In addition to the above, hourly peak demand for the respective month is also forecasted.
- 4.4.9. Considering that, there is a significant variation in hourly Average and Peak Demand for a month, balance is to be maintained for minimizing over procurement. To optimize and avoid over procurement based on peak demand for the entire month. Accordingly, Demand is considered by adding one Standard Deviation to Average Demand which is the required Average+1 Sigma demand, thereby increasing the procurement volume to cover around 70% of the days whose demand varies from Average Demand, thereby being able to meet demand for around 90% of the days of the month, leaving the marginal differential volume for procurement though Spot/Collective Markets.
- 4.4.10. Considering the present and upcoming plants availability and based on historic data, 78% of total Availability is considered as base supply. Generation from hydro plants have been considered as per their historic schedules. The following upcoming plants are considered as per the expected COD.

COD of Upcoming Plants				
S.No	Plant		Capacity (MW)	Expected COD
1	Harduaganj Extension	Unit-1	660	Dec-21
2	Ghatampur	Unit-1	561	Mar-22
3	Ghatampur	Unit-2	561	Jul-22
4	Jawaharpur	Unit-1	660	Aug-22
5	Obra-C	Unit-1	660	Aug-22

- 4.4.11. The expected availability for the summer months April-22 to October-22 of FY 22-23 as below:

Power Availability for FY-2022-23							
Time	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22
00:00-01:00	19853	21016	20974	21114	21615	22256	21377
01:00-02:00	19801	20883	20895	21105	21559	21964	21157
02:00-03:00	19311	20737	20858	21036	21490	21717	21102
03:00-04:00	19258	20643	20677	20956	21415	21544	21063
04:00-05:00	19133	20626	20603	20988	21410	21543	21159
05:00-06:00	19137	20786	20647	21010	21457	21680	21433
06:00-07:00	19382	20865	20830	21051	21625	21904	21573
07:00-08:00	19636	21249	21183	21410	22076	22372	21652
08:00-09:00	20243	21648	21751	21941	22577	22926	21792
09:00-10:00	20616	22114	22261	22428	23022	23443	22243
10:00-11:00	20905	22642	22676	22783	23288	23690	22784
11:00-12:00	21007	22870	22831	23019	23388	23872	23018
12:00-13:00	21151	22823	22992	23067	23497	23759	22955
13:00-14:00	21162	22775	22840	22917	23384	23607	22834
14:00-15:00	20931	22651	22746	22821	23204	23449	22684
15:00-16:00	20563	22302	22377	22539	22868	23036	22248
16:00-17:00	20085	21692	21684	21985	22356	22470	21792
17:00-18:00	20123	21245	21166	21531	21919	22021	22050
18:00-19:00	20320	21347	21126	21428	21863	22642	22869
19:00-20:00	20544	21624	21364	21418	22056	23159	22936
20:00-21:00	20570	21584	21388	21344	22013	23033	22574
21:00-22:00	20396	21519	21362	21402	22004	22822	22078
22:00-23:00	20194	21427	21296	21354	21904	22651	21876
23:00-24:00	19753	21356	21293	21389	21899	22615	21711

4.4.12. The expected Average+1 Sigma demand for the summer months of FY 22-23 as below:

Average+1 Sigma RDM for FY-2022-23							
Time	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22
00:00-01:00	18638	23679	24407	22655	22223	21275	19193
01:00-02:00	18423	23254	24140	22138	22120	21151	18668
02:00-03:00	18007	23027	23667	21893	21395	21057	18396
03:00-04:00	17671	22428	23390	21392	21246	20698	18551
04:00-05:00	18113	22220	23712	21757	21264	20726	19434
05:00-06:00	19086	22912	23725	21974	21943	22038	20806
06:00-07:00	17757	21376	22265	20501	20744	20691	20298
07:00-08:00	16025	20092	20968	19924	19712	19654	19442
08:00-09:00	15474	19793	20537	19783	19329	19160	18445
09:00-10:00	15509	19345	20571	19543	18886	19174	18149
10:00-11:00	14952	18875	20357	19184	18264	18764	17516
11:00-12:00	15329	19105	20988	19628	18689	19026	17236
12:00-13:00	15180	19430	21955	20280	19384	19632	17039
13:00-14:00	15255	19620	22274	20583	19661	19578	17694
14:00-15:00	14829	19073	21628	19752	19211	19411	17442
15:00-16:00	14970	19054	21427	19322	19107	19306	17290
16:00-17:00	15698	19707	21453	19713	19530	19553	18093
17:00-18:00	17782	21715	22527	20530	20748	20678	21012
18:00-19:00	19423	22465	22379	21091	21263	21584	21844
19:00-20:00	20839	24463	24702	23028	23270	22555	21583
20:00-21:00	20738	24773	25188	23487	23610	22300	21134
21:00-22:00	20313	24531	25176	23618	23594	22222	20852
22:00-23:00	19605	24305	24737	23228	23126	21737	20118
23:00-24:00	19191	24091	24586	23064	22776	21263	19469

4.4.13. Considering the expected demand and availability, the hourly surplus and deficits are as below:

Demand Supply Gap for FY-2022-23							
Time	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22
00:00-01:00	1215	-2663	-3433	-1541	-608	981	2184
01:00-02:00	1377	-2371	-3245	-1033	-560	812	2489
02:00-03:00	1304	-2289	-2809	-857	95	660	2706
03:00-04:00	1587	-1785	-2713	-436	170	846	2512
04:00-05:00	1020	-1594	-3109	-769	146	817	1725
05:00-06:00	51	-2127	-3078	-965	-486	-358	626
06:00-07:00	1625	-511	-1435	550	881	1212	1275
07:00-08:00	3611	1157	215	1485	2364	2718	2210
08:00-09:00	4769	1856	1214	2158	3248	3766	3347
09:00-10:00	5107	2769	1691	2884	4137	4269	4094
10:00-11:00	5953	3767	2319	3599	5024	4927	5267
11:00-12:00	5678	3765	1842	3391	4700	4847	5781
12:00-13:00	5971	3393	1037	2787	4113	4127	5916
13:00-14:00	5906	3155	566	2334	3723	4029	5140
14:00-15:00	6101	3578	1117	3070	3992	4038	5242
15:00-16:00	5593	3248	950	3216	3760	3730	4958
16:00-17:00	4388	1986	231	2272	2825	2917	3699
17:00-18:00	2341	-470	-1361	1001	1171	1343	1038
18:00-19:00	897	-1117	-1254	338	600	1058	1025
19:00-20:00	-295	-2839	-3337	-1610	-1214	604	1353
20:00-21:00	-168	-3189	-3800	-2143	-1597	733	1440
21:00-22:00	83	-3012	-3814	-2215	-1590	600	1225
22:00-23:00	590	-2878	-3441	-1874	-1222	914	1758
23:00-24:00	562	-2735	-3293	-1674	-878	1352	2242

- 4.4.14. To meet the deficits in the peak hours of summer months, power is proposed to be procured through DEEP in two tranches as below.

DEEP Procurement Proposal								
Month	Period	Hours	Tranche I(MW)	Tranche II(MW)	Total MW	Tranche I MU	Tranche II MU	Total MU
May-22	00:00 - 06:00	6	800	400	1200	149	74	223
	18:00 - 24:00	6	1000	500	1500	186	93	279
Jun-22	00:00 - 06:00	6	1200	600	1800	216	108	324
	18:00 - 24:00	6	1500	500	2000	270	90	360
Jul-22	00:00 - 06:00	6	500	300	800	93	56	149
	19:00 - 24:00	5	600	400	1000	93	62	155
Aug-22	19:00 - 24:00	5	400	200	600	62	31	93
Total MU's						1069	514	1583

- 4.4.15. The petitioner requests the Hon'ble Commission may kindly allow the short-term power purchases to fulfil contingency requirement of the Licensee via bilateral, power exchange, traders, etc. at the time of the true-up of the respective year.
- 4.4.16. The assumptions considered for projection of power purchase quantum and cost is as follows:

Table 4-5 Assumptions considered for FY 2022-23

Sl No.	Generating Company/ Type of Generator	Power Purchase Quantum	Fixed & Variable Charges
Thermal			
1.	UPRUVNL	Month wise power purchase quantum for FY 22-23 is projected based on the monthly average availability of generating stations from April 2016 to March 2021. For upcoming thermal generating stations of UPRVUNL, 85% PLF is considered.	For UPRVUNL & NTPC, the fixed charges have been computed based on the fixed charges actually incurred by the respective plants in True up of FY 2020-21 with escalation factor of 5% per year. For UPRVUNL & NTPC, energy charges have been computed based on actual average energy charge for FY 2020-21 with escalation factor of 2%. For Case-I projects, fixed charges have been projected based on actual charges of FY 2020-21 & energy charges have been projected based on average energy charges for FY 2020-21 used in MOD.
2.	NTPC		
3.	IPP/ JV (Thermal)		

Sl No.	Generating Company/ Type of Generator	Power Purchase Quantum	Fixed & Variable Charges
			For upcoming generating stations, fixed charges have been computed based on the assumption of 85% availability for the period post Commissioning for thermal generating stations and 50% availability for the period post Commissioning for Hydro generating stations.
HYDRO			
4.	UPJVNL	Month wise power purchase quantum for FY 22-23 is projected based on the monthly average availability of generating stations from April 2016 to March 2021. Further, for upcoming Hydro generating stations, 50% PLF of have been considered for projection of net power purchase quantum for FY 2022-23.	The fixed charges have been computed based on the actual charges incurred in true up for FY 2020-21 with escalation factor of 5% per year. The energy charges have been computed based on actual average variable charge for the FY 2020-21 with escalation factor of 2%. For upcoming generating stations, fixed charges have been computed based on the assumption of 85% availability for the period post Commissioning for thermal generating stations and 50% availability for the period post Commissioning for Hydro generating stations. .
5.	NHPC		
6.	SJVN		
7.	THDC		
8.	IPP/JV (Hydro)		
Nuclear			
9.	NPCIL	The net power purchase quantum for FY 2022-23 is projected in line with generation of FY 2020-21.	Variable charges have been escalated by 2% per year.
Renewable Energy			
10.	Solar	The net power purchase quantum for FY 2022-23 is estimated based on 19% CUF for Solar.	The energy charges have been computed based on the weighted average energy charge rate of solar generating stations.
11.	Wind	The net power purchase quantum for FY 2022-23 is estimated based on 25% CUF.	The energy charges have been computed based on the weighted average energy charge rate of wind generating stations.
12.	MSW	The net power purchase quantum for FY 2022-23 is estimated based on 75% CUF in line with UPERC (Captive and Renewable Energy Generating Plants) Regulations, 2019).	The energy charges have been considered in line with UPERC (Captive and Renewable Energy Generating Plants) Regulations, 2019).

Sl No.	Generating Company/ Type of Generator	Power Purchase Quantum	Fixed & Variable Charges
		and Renewable Energy Generating Plants) Regulations, 2019).	
13.	Biomass	The net power purchase quantum for FY 2022-23 is estimated based on 50% CUF.	The energy charges have been computed based on the weighted average energy charge rate of Biomass generating stations.
14.	Bagasse	The net power purchase quantum for FY 2022-23 is estimated based on 50% CUF.	The energy charges have been computed based on the weighted average energy charge rate of Bagasse generating stations.

4.4.18. The details of power purchase cost from generating stations for FY 22-23 based on above assumptions is shown in the table below:

Table 4-6 Generating Station-wise Power Purchase Cost & per unit total cost for FY 2022-23

S.No	Source of Power (Station wise)	FY 2022-23						
		Units despatched after MOD (MU)	Annual Fixed Charges		Annual Energy/ Variable charge		Total Cost	
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)
A	Long term Sources							
a	Power procured from own Generating Stations (if any)							
b	From State Generating Stations Thermal							
1	ANPARA-A	3,553.55	0.77	272.06	2.02	717.86	2.79	989.91
2	ANPARA-B	6,730.09	0.50	339.44	1.84	1,241.10	2.35	1,580.54
3	PANKI			-			-	-
4	PARICHHA			-			-	-
5	PARICHHA EXT.	1,192.92	3.08	367.86	3.88	462.93	6.96	830.79
6	OBRA-A			-			-	-
7	OBRA-B	1,841.43	2.00	367.64	2.54	468.09	4.54	835.73
8	HARDUAGANJ	-	-	18.18	-	-		18.18
9	HARDUAGANJ EXT.	1,253.07	4.68	586.95	3.79	474.96	8.47	1,061.91
10	PARICHHA EXT. STAGE-II	1,183.96	4.64	549.92	3.89	460.35	8.53	1,010.26
11	ANPARA-D	5,334.75	1.27	680.12	1.86	991.13	3.13	1,671.25
12	Panki Extension	393.38	2.50	98.35	2.18	85.95	4.68	184.29
13	HARDUAGANJ EXT. Stage II	1,941.54	5.01	972.67	3.33	646.39	8.34	1,619.07
14	OBRA-C	3,477.01	2.59	899.39	2.02	701.79	4.61	1,601.18
15	Jawaharpur	774.08	11.07	856.56	2.79	215.83	13.85	1,072.40
	Sub-Total	27,675.80	2.17	6,009.14	2.34	6,466.38	4.51	12,475.52
c	From State Generating Stations Hydro							
1	RIHAND	537.17	0.34	18.10	1.22	65.68	1.56	83.78
2	OBRA (H)	268.50	0.36	9.66	0.81	21.67	1.17	31.34
3	MATATILA	61.69	0.49	3.05	0.82	5.07	1.32	8.12

S.No	Source of Power (Station wise)	FY 2022-23						
		Units despatched after MOD (MU)	Annual Fixed Charges		Annual Energy/ Variable charge		Total Cost	
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)
4	KHARA	257.84	0.53	13.56	0.50	13.00	1.03	26.55
5	UGC	24.00	-	-	2.94	7.07	2.94	7.07
6	SHEETLA	2.10	-	-	2.01	0.42	2.01	0.42
7	BELKA	2.36	-	-	1.85	0.44	1.85	0.44
8	BABAIL	2.40	-	-	3.27	0.79	3.27	0.79
	Sub-Total	1,156.06	0.38	44.37	0.99	114.14	1.37	158.50
d	From Central Sector Generating Stations							
a	Thermal (NTPC)							
1	ANTA GPS	42.12	13.11	55.23	4.64	19.56	17.76	74.79
2	AURAIYA GPS	-	-	109.96	-	-	-	109.96
3	DADRI GPS	443.41	2.64	116.84	3.95	175.26	6.59	292.10
4	JHANOR GPS	0.14	13.42	0.19	2.10	0.03	15.52	0.22
5	KAWAS GPS	0.14	11.59	0.17	2.11	0.03	13.70	0.20
6	TANDA TPS	921.98	4.02	370.40	3.61	333.04	7.63	703.44
7	FGUTPS-1	530.69	3.52	187.05	3.29	174.67	6.82	361.72
8	FGUTPS-2	362.90	2.60	94.18	3.35	121.73	5.95	215.92
9	FGUTPS-3	178.94	3.47	62.03	3.43	61.45	6.90	123.47
10	FGUTPS-4	613.98	4.14	254.23	3.32	203.70	7.46	457.93
11	FSTPS	-	-	-	-	-	-	-
12	KHTPS-1	199.58	2.59	51.67	2.45	48.84	5.04	100.50
13	KHTPS-2	626.64	2.44	153.00	2.39	149.74	4.83	302.74
14	NCTPS-1	220.62	2.55	56.29	3.34	73.79	5.90	130.08
15	NCTPS-2	128.09	9.26	118.55	3.88	49.64	13.13	168.19
16	RIHAND-1	2,247.33	0.85	190.10	1.57	353.03	2.42	543.12
17	RIHAND-2	2,075.44	0.75	156.08	1.53	317.63	2.28	473.72
18	RIHAND-3	2,375.56	1.46	346.79	1.58	374.45	3.04	721.24
19	SINGRAULI	5,140.01	0.69	356.26	1.54	789.54	2.23	1,145.79
20	KORBA-I STPS	19.95	0.61	1.22	1.50	3.00	2.12	4.22

S.No	Source of Power (Station wise)	FY 2022-23						
		Units despatched after MOD (MU)	Annual Fixed Charges		Annual Energy/ Variable charge		Total Cost	
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)
21	KORBA-III STPS	9.52	1.27	1.21	1.53	1.46	2.81	2.67
22	MAUDA-I STPS	7.63	4.42	3.37	3.32	2.53	7.74	5.90
23	MAUDA-II STPS	10.05	4.14	4.16	3.30	3.32	7.44	7.48
24	SOLAPUR TPS	4.71	8.75	4.12	3.80	1.79	12.54	5.91
25	SIPAT-I	38.39	1.17	4.51	1.60	6.13	2.77	10.64
26	SIPAT-II STPS	12.77	1.18	1.50	1.63	2.08	2.80	3.58
27	VINDHYACHAL-I STPS	17.63	0.89	1.58	1.79	3.16	2.69	4.74
28	VINDHYACHAL-II STPS	13.17	0.71	0.93	1.72	2.27	2.43	3.20
29	VINDHYACHAL-III STPS	14.66	1.03	1.52	1.73	2.53	2.76	4.05
30	VINDHYACHAL-IV STPS	17.86	1.64	2.92	1.76	3.15	3.40	6.07
31	VINDHYACHAL-V STPS	9.17	1.84	1.68	1.81	1.66	3.64	3.34
32	Tanda Stage II	2,775.40	1.89	524.11	2.84	788.33	4.73	1,312.44
33	NABINAGAR POWER PROJECT	1,466.80	1.06	156.03	2.18	320.05	3.25	476.08
34	Indira Gandhi STPS, Jhajjar	-	-	-	-	-	-	-
35	GADARWARA STPS-I	-	-	3.38	-	-	-	3.38
36	LARA STPS-I	15.66	2.77	4.34	2.40	3.75	5.17	8.09
37	KHARGONE STPS	9.35	5.55	5.20	3.15	2.94	8.70	8.14
	Sub-Total	20,550.28	1.65	3,400.79	2.14	4,394.25	3.79	7,795.04
e	NPCIL							
1	KAPS	5.66	-	-	2.40	1.36	2.40	1.36
2	NAPP	1,119.98	-	-	3.15	352.68	3.15	352.68
3	TAPP-3 & 4	21.53	-	-	2.95	6.36	2.95	6.36
4	RAPP-3 & 4	520.65	-	-	3.42	177.93	3.42	177.93
5	RAPP-5 & 6	680.53	-	-	4.01	272.75	4.01	272.75
	Sub-Total	2,348.35	-	-	3.45	811.07	3.45	811.07
f	Hydro (NHPC)							
1	SALAL	232.34	0.86	19.89	0.69	16.05	1.55	35.94
2	TANAKPUR	80.35	2.40	19.32	1.75	14.05	4.15	33.37

S.No	Source of Power (Station wise)	FY 2022-23						
		Units despatched after MOD (MU)	Annual Fixed Charges		Annual Energy/ Variable charge		Total Cost	
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)
3	CHAMERA-I	465.34	0.93	43.08	1.23	57.46	2.16	100.54
4	URI	562.28	0.99	55.54	0.88	49.74	1.87	105.29
5	CHAMERA-II	308.33	0.78	24.13	1.22	37.72	2.01	61.85
6	DHAULIGANGA	250.42	1.62	40.53	1.36	34.12	2.98	74.65
7	DULHASTI	504.29	3.09	156.06	2.73	137.88	5.83	293.94
8	SEWA-II	117.13	2.05	24.01	2.75	32.27	4.80	56.27
9	CHAMERA-III	219.28	2.74	60.08	2.16	47.42	4.90	107.50
10	URI-II	319.63	2.61	83.41	2.06	65.85	4.67	149.26
11	PARBATI-III	160.93	4.63	74.50	1.81	29.10	6.44	103.60
12	KISHANGANGA	463.53	2.29	106.05	2.20	101.81	4.48	207.86
13	PARBATI-II	675.08	0.91	61.58	2.34	158.03	3.25	219.61
14	SUBANSIRI LOWER	131.09	2.22	29.13	2.34	30.69	4.56	59.82
15	PAKALDUL	-	-	-	-	-	-	-
	Sub-Total	4,490.01	1.78	797.29	1.81	812.19	3.58	1,609.48
g	HYDRO (NTPC)							
1	KOLDAM HPS	601.23	3.09	186.04	2.73	164.14	5.82	350.18
2	TAPOVAN VISHNUGARH	-	-	-	-	-	-	-
3	LATA TAPOVAN HEP	-	-	-	-	-	-	-
4	SINGRAULI SHPS	22.71	9.89	22.45	3.53	8.01	13.42	30.46
	Sub-Total	623.94	3.34	208.49	2.76	172.15	6.10	380.64
h	THDC							
	HYDRO							
1	TEHRI	1,226.63	2.17	266.17	2.07	253.45	4.24	519.63
2	KOTESHWAR	498.96	2.52	125.52	2.33	116.03	4.84	241.55
3	Dhukwan SHP- THDC	56.49	-	-	5.12	28.91	5.12	28.91
4	VISHNUGARH PIPAL KOTHI	-	-	-	-	-	-	-
	Thermal							
1	KHURJA STPP	-	-	-	-	-	-	-

S.No	Source of Power (Station wise)	FY 2022-23						
		Units despatched after MOD (MU)	Annual Fixed Charges		Annual Energy/ Variable charge		Total Cost	
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)
	Sub-Total	1,782.08	4.69	391.69	2.24	398.39	4.43	790.09
i	SJVN							
1	RAMPUR	268.93	3.29	88.60	1.67	44.93	4.97	133.53
2	NATHPA JHAKRI	1,034.58	2.60	268.97	0.85	87.92	3.45	356.89
	Sub-Total	1,303.51	2.74	357.58	1.02	132.84	3.76	490.42
j	NEEPCO							
1	Kameng HEP	224.18	-	-	4.16	93.32	4.16	93.32
k	IPP/JV							
	HYDRO							
1	TALA	133.82	-	-	2.25	30.07	2.25	30.07
2	VISHNU PRAYAG	1,551.61	0.16	24.56	1.07	166.53	1.23	191.09
3	KARCHAM	800.53	2.53	202.75	1.39	111.67	3.93	314.42
4	TEESTA-III	862.62	4.19	361.50	2.25	194.51	6.45	556.01
5	SRI NAGAR HEP	1,229.07	3.34	410.11	2.49	306.21	5.83	716.33
6	Rajghat Hydro	-	-	-	-	-	-	-
7	Hydro (Competitive Bidding)	1,501.44	1.99	299.33	3.58	537.52	5.57	836.85
	Thermal							
1	Meja Thermal Power Plant	3,012.33	3.45	1,037.77	2.61	784.99	6.05	1,822.76
2	LANCO	7,117.81	0.87	620.13	2.12	1,508.98	2.99	2,129.10
4	BEPL BARKHERA	208.78	5.85	122.05	3.57	74.49	9.41	196.54
5	BEPL KHAMBHAKHERA	208.78	5.91	123.34	3.57	74.52	9.48	197.85
6	BEPL KUNDRAKHI	208.78	5.88	122.79	3.28	68.53	9.16	191.31
7	BEPL MAQSOODAPUR	208.78	5.83	121.69	3.47	72.45	9.30	194.14
8	BEPL UTRAULA	208.78	6.05	126.29	3.47	72.55	9.52	198.84
9	KSK MAHANADI	2,651.18	6.19	1,641.84	2.84	752.59	9.03	2,394.43
10	LALITPUR	5,824.63	5.78	3,366.19	3.10	1,806.41	8.88	5,172.61
11	M.B.POWER	2,466.86	2.90	716.39	2.19	539.33	5.09	1,255.72

S.No	Source of Power (Station wise)	FY 2022-23						
		Units despatched after MOD (MU)	Annual Fixed Charges		Annual Energy/ Variable charge		Total Cost	
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)
12	PRAYAGRAJ POWER	4,449.91	3.37	1,498.99	2.52	1,120.35	5.89	2,619.34
13	R.K.M.POWER	2,085.62	3.19	665.97	1.96	408.80	5.15	1,074.77
14	ROSA-1&2	3,018.29	4.25	1,282.92	2.67	806.82	6.92	2,089.74
15	SASAN	3,700.10	0.15	55.71	1.11	411.91	1.26	467.62
16	TRN ENERGY	2,005.57	1.58	316.87	1.57	315.62	3.15	632.50
17	Ghatampur	6,193.35	3.81	2,359.51	2.30	1,424.03	6.11	3,783.54
	Sub-Total	49,648.66	3.12	15,476.70	2.33	11,588.87	5.45	27,065.57
	Total	109,802.88	2.43	26,686.04	2.28	24,983.61	4.71	51,669.64
B	Medium term Sources							
C	Short term Sources	2,720.00	-	-	5.50	1,496.00	5.50	1,496.00
	Station/Source 1							
D	Cogen/ Captive							
	Baggasse/Cogen/ CPP 1	3,934.14	-	-	3.21	1,261.54	3.21	1,261.54
	Baggasse/Cogen/ CPP 2	-	-	-	-	-	-	-
	Sub-Total	3,934.14	-	-	3.21	1,261.54	3.21	1,261.54
E	Bilateral & Others (Power purchased trough Trading)							-
1	Solar (Existing)	3,882.26	-	-	3.89	1,508.37	3.89	1,508.37
2	Solar (FY 20)	-	-	-	-	-	-	-
3	Solar (FY 21)	-	-	-	-	-	-	-
4	Solar (FY 22)	720.00	-	-	3.00	216.00	3.00	216.00
5	Solar (FY 23)	253.06	-	-	3.00	75.92	3.00	75.92
6	SOLAR FY (24)							
7	SOLAR FY 25							
	Sub-Total	4,855.32	-	-	3.71	1,800.29	3.71	1,800.29

S.No	Source of Power (Station wise)	FY 2022-23						
		Units despatched after MOD (MU)	Annual Fixed Charges		Annual Energy/ Variable charge		Total Cost	
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)
								-
G	Non-Solar (Renewable)							-
1	WIND (Existing)	1,403.30	-	-	3.33	466.62	3.33	466.62
2	WIND (FY 20)	-	-	-	-	-	-	-
3	WIND (FY 21)	-	-	-	-	-	-	-
4	WIND (FY 22)	1,775.01	-	-	3.33	590.22	3.33	590.22
5	WIND (FY 23)	1,509.55	-	-	3.33	501.95	3.33	501.95
6	Biomass Existing	146.73	-	-	6.51	95.45	6.51	95.45
7	Biomass FY 20	-	-	-	-	-	-	-
8	MSW FY 21	193.82	-	-	7.61	147.49	7.61	147.49
	Sub-Total	5,028.40	-	-	3.58	1,801.72	3.58	1,801.72
	Others							
1	Slop Based Power Project	186.15	1.44	26.89	1.44	26.89	2.89	53.78
H	NVVNL Coal							
I	Short Term Sources							
J	REC				-	-	-	-
K	Banking				-	-	-	-
L	PGCIL Charges			4,134.35	-	-	-	4,134.35
M	WUPPTCL Charges			919.62	-	-	-	919.62
N	SEUPPTCL Charges			316.99	-	-	-	316.99
O	Reactive Energy Charges			-	-	-	-	-
P	Case-I Transmission Charges			840.32	-	-	-	840.32
Q	STU Charges			-	-	-	-	-
	Any Other Charges			-	-	-	-	-
	Less			-	-	-	-	-
	Late Payment Surcharge							-
	Grand Total	126,526.89	2.60	32,924.20	2.48	31,370.05	5.08	64,294.25

Differential Bulk Supply Tariff (DBST)

4.4.19. The Petitioner has worked out the power purchase cost for FY 2022-23 based on the above Differential Bulk Supply Tariff (DBST).

4.4.20. Computation of DBST as per the Commission approved methodology is shown in the below:

Table 4-7 Computation of DBST for FY 2022-23

S.No.	Particulars	Formulae	DVVNL	PVVNL	PuVVNL	MVVNL	KESCO	Total
1	Revenue from Tariff including subsidy (Rs Cr)	A	15,930.67	26,191.05	17,135.33	15,601.72	2,885.76	77,744.53
2	Energy Sales (MU)	B	21,929.48	31,018.05	22,660.99	21,027.82	3,600.26	100,236.60
3	Power Procurement Cost							
A1	Power Procurement Cost – Allocated and Unallocated PPAs (Rs Cr)							59,319.58
A2	Inter State Transmission Charges (Rs Cr)							4974.67
A1+A2	Total Power Procurement Cost excluding intra state Transmission Charges (In Rs Cr)	C						64294.25
4	Power Procurement cost of Allocated PPAs (Rs Cr)	D	2289.82	4241.48	2374.02	2374.02	130.97	11,410.32
5	Total Power Required at Discom Periphery (MU)	E	27,429.00	36,574.36	27,494.71	25,399.49	3,935.77	120,833.32
6	Power at Discom Periphery from allocated PPAs (MU)	F	5118.56	9945.09	4975.30	4975.30	216.09	25,230.34
7	Other Cost (Intra State Transmission, O&M, Interest, Dep etc.) (Rs. Cr.)	G	3,533.79	4,377.79	4,891.65	4,111.44	587.50	17,502.16
8	ABR (Rs/ Unit)	$H=(A/B)*10$	7.26	8.44	7.56	7.42	8.02	7.76
9	Other Cost (Rs/Unit of Sale)	$I=G*10/B$	1.61	1.41	2.16	1.96	1.63	1.75
10	Power Purchase Rate							
A	Allocated PPAs per unit of sale (Rs/unit)	$J=D*10/B$	1.04	1.37	1.05	1.13	0.36	1.14
B	Unallocated PPAs per unit of sale	$K=(C-\text{Total PP at "D"})*10/\text{Total Sale at "B"}$	5.28					
11	Revenue available for unallocated PPAs (Rs./unit of sale)	$L=H-I-J$	4.61	5.67	4.36	4.34	6.02	4.87
12	Power Purchase Allocation (per unit of sale) "K" in the ratio of available Revenue "L"	M	4.99	6.14	4.72	4.70	6.52	5.28
13	Total Power Purchase cost per unit of sale including allocated PPAs	$N=J+M$	6.04	7.50	5.76	5.82	6.88	6.41

S.No.	Particulars	Formulae	DVVNL	PVVNL	PuVVNL	MVVNL	KESCO	Total
14	Total Power Purchase Cost (Rs Crs)	$O=N*B/10$	13,235.53	23,271.30	13,062.63	12,246.70	2,478.09	64,294.25
	DBST (Rs/Unit)							
15	DBST Computation of Allocated PPAs	P	4.47	4.26	4.77	4.77	6.06	4.52
16	DBST Computation of Unallocated PPAs	$Q=M*B/(E-F)$	4.91	7.15	4.75	4.83	6.31	5.53
17	DBST of total PPAs	$R=O*10/E$	4.83	6.36	4.75	4.82	6.30	5.32

4.4.21. The allowable power purchase cost for FY 2022-23 is shown in the table below:

Table 4-8 Power Purchase Cost for FY 2022-23

Particulars	Unit	Projected
Allowable Power Purchase	MU	25,399
DBST Rate	Rs/kWh	4.82
Allowable Power Purchase Cost	Rs Crore	12,242.17

4.5. Intra-State Transmission Charges

4.5.1. The proposed intra State transmission charges have been computed at the intra-State transmission rate approved by the Hon'ble Commission in the Tariff Order for FY 2021-22 dated 29 July 2021, which is shown in the Table below:

Table 4-9 Intra-State Transmission Charges for FY 2022-23

Particulars	Unit	Projected
Units Wheeled	MU	25,399
Transmission Rate (Approved in the Tariff Order for FY 2021-22 dated 29.07.2021)	Rs/kWh	0.24
Transmission Charges	Rs Crore	614.92

4.6. Operation and Maintenance Expenses

- 4.6.1. The Petitioner has discussed the approach for the Operation and Maintenance expenses in detail in the True-up section for FY 2020-21 above.
- 4.6.2. Therefore, the Petitioner request the Hon'ble Commission to allow the O&M Expenses by considering the computation of O&M expenses based on the proposed methodology as shown in true-up sections.

WPI and CPI Escalation Rates

4.6.3. Firstly, the Petitioner has calculated the inflation index based on the weighted average index of WPI and CPI. The WPI and CPI index has been considered, as available on the website of Economic Advisor and Ministry of Labour Bureau, Govt. of India respectively. The summary of WPI & CPI Escalation rate is shown in table below:

Table 4-10 Inflation Indices

FY	Index		Inflation rate	
	WPI	CPI	WPI	CPI
FY 2017-18	114.88	284.42	2.92%	3.08%
FY 2018-19	119.79	299.92	4.28%	5.45%
FY 2019-20	121.83	322.50	1.70%	7.53%

FY	Index		Inflation rate	
	WPI	CPI	WPI	CPI
FY 2020-21	123.38	338.71	1.27%	5.03%
FY 2021-22	137.69	353.40	4.86%	5.63%

Employee Expenses

4.6.4. The Petitioner has projected its Employee Expenses based on the Employee Expenses computed in Section 3. The computation for the same is shown below.

Table 4-11 Computation of Employee Expenses for FY 2022-23 (Rs Crore)

Particulars	Claimed in Instant Petition for FY 2021-22	Average CPI Escalation of last 3 years.	Computed (Rs. Cr)
Employee Expenses	1,126.54	5.63%	1,189.98

4.6.5. Further, the capitalisation has projected based on same ratio of employee expenses capitalisation and employee expenses for FY 2020-21 (True-up year). Accordingly, Employee Expenses and its capitalisation determined for FY 2022-23 is shown in table below:

Table 4-12 Employee Expenses for FY 2022-23 (Rs Crore)

Sl No.	Particular	Projected
A	Gross Employee Expenses after escalation	1,189.98
B	Less: Employee Expenses capitalized	644.56
C	Net Employee Expenses	545.42

Repair & Maintenance Expenses (R&M Expenses)

4.6.6. The Petitioner has projected its R&M Expenses based on R&M Expenses claimed in section 3. The computation for R&M Expenses for FY 2022-23 is shown below.

Table 4-13 Computation of R&M Expenses for FY 2022-23 (Rs Crore)

Particulars	Claimed in Instant Petition for FY 2021-22	Average WPI Escalation of last 3 years.	Computed (Rs. Cr)
R&M Expenses	387.37	4.86%	406.19

4.6.7. Accordingly, Net R&M Expenses determined for FY 2022-23 is shown in table below:

Table 4-14 R&M Expenses for FY 2022-23 (Rs Crore)

S. No.	Particulars	Projected
1	Gross R&M Expenses after escalation	406.19
2	Less: R&M Expenses capitalized	-
3	Net R&M Expenses	406.19

Administrative & General Expenses (A&G)

- 4.6.8. The Petitioner has projected its A&G Expenses based on A&G Expenses claimed in section 3. The computation for R&M Expenses for FY 2022-23 is shown below.

Table 4-15 A&G Expenses for FY 2022-23 (Rs Crore)

Particulars	Claimed in Instant Petition for FY 2021-22	Average WPI Escalation of last 3 years.	Computed (Rs. Cr)
A&G Expenses	322.82	4.86%	338.50

- 4.6.9. Accordingly, Net R&M Expenses determined for FY 2022-23 is shown in table below:

Table 4-16 A&G Expenses for FY 2022-23 (Rs Crore)

Sr. No.	Particulars	Projected
1	Gross A&G Expenses after escalation	338.50
2	Less: A&G expenses capitalized	-
3	Net A&G expenses	338.50

Additional O&M for Smart metering OPEX

- 4.6.10. Ministry of Power (Government of India) vide their letter dated 08.09.2016 wrote to Forum of Regulators (FOR) about the strategy for roll out of advance metering infrastructure in the States sighting clause 8.4 of the revised National Tariff Policy issued on January 28, 2016 regarding installation and provision of smart meters. Central Electricity Authority (CEA) also reiterated the said clause of revised National Tariff Policy and intimated the Power Secretaries of all the States including State of Uttar Pradesh about technical specification of smart meters. The CEA also asked the States to prepare a detailed plan for installation of smart meters and submit the same to respective State Regulatory Commissions for approval.
- 4.6.11. The Hon'ble Commission vide its letter dated 16.05.2018 directed UPPCL to submit the detailed roll out plan of installation of smart meters for the State Discoms of Uttar Pradesh for the approval of the Hon'ble Commission.
- 4.6.12. In response to the directions of the Hon'ble Commission and letter received from CEA, UPPCL vide its letter dated 06.08.2018 submitted the smart meter roll out plan for the State Discoms under "Opex Model". Under "Opex Model", State Discoms are required to pay monthly fee

(arrived at through competitive bidding process conducted by EESL) for each meter reading through Smart Meter to Energy Efficiency Services Limited (EESL), a Government of India company and there is no additional burden of depreciation, interest and return on equity on the consumer towards the cost of Smart Meter. A presentation in this regard was also made at UPERC on 11.9.2018 to address the queries raised by the Hon'ble Commission.

- 4.6.13. The Hon'ble Commission vide Order dated 15.11.2018 approved the Smart Meter rollout plan for State Discoms of Uttar Pradesh. The operative part of the Hon'ble Commission's Order is reproduced as under:

"Since installation of Smart Meters is a national programme and has produced very encouraging financial returns in private Discoms, the Commission approves the proposed roll out plan of UPPCL and Discoms submitted before the Commission....."

- 4.6.14. Following is mentioned in Hon'ble Commissions order dt. 15.11.2018 at Sl. No. 5 of reply of UPPCL.

"DISCOM will pay EESL on OPEX basis as O&M expenditure. The assets will be in the books of EESL till the transfer of assets at the end of project at zero value."

- 4.6.15. Further Hon'ble Commission in its Tariff Order FY 2019-20 dt. 03.09.2019 at clause no. 6.18.7 has mentioned this expenditure under the head of A&G expenses as below:

"6.18.7 It may kindly be noted that this type of expenses were not envisaged during projection of MYT O&M norms for FY 2017-18 to FY 2019-20. Further, O&M Norms approved by the Hon'ble Commission were based on five year Audited Accounts, which didn't have any O&M expenses towards smart metering. The amount of this additional O&M has been entered as rent in the replies of comments on roll out plan submitted to Hon'ble Commission vide MD, UPPCL letter no. 352/CE(Com-II)/Smart Meter/18 dt. 25.09.2018. Therefore, this expense may be considered under the head of A&G expenses as additional expenses."

- 4.6.16. The amount sought as 'Additional A&G Expenses for smart metering is payable to EESL to cover cost towards smart meter and box installation, AMI software cost, consumer indexing, training, integration and Commissioning of AMI solution. It may be noted that this cost has been proposed to be recovered under Opex model based on per meter per month basis and there shall be no additional burden of depreciation, interest and return on equity on the consumer.

- 4.6.17. It is submitted that the Opex to be incurred by the petitioner for implementation of Smart Meter rollout plan is not part of the normative O&M expenses provided to the Licensee under the Multi-Year Tariff Order dated 22.01.2019 and Tariff Regulations 2019 since: -

(a)The same was not envisaged during projection of MYT O&M norms for FY 2017-18 to FY 2019-20 and for the control period 2021-2025.

(b)The normative O&M norms approved by the Hon'ble Commission are based on previous five-year Audited Accounts, which does not include any O&M expenses towards smart metering.

- 4.6.18. Moreover, the Hon'ble Commission's observation that the smart-meter roll out project is a self-sustaining model since the Opex cost to be paid by the licensees will be compensated by

overall reduction in O&M cost due to improved billing and collection efficiency on account of installation of smart meters is debatable since: -

(a) It is an attempt to compensate the present additional O&M expenses on account of smart meters Opex with future probable reduction in O&M cost. It is most respectfully submitted that a court of law is not permitted to pass orders based on conjecture, surmises or the possibility of happening of any event. A court has to pass orders on facts and data available on record. In the present case Ld. UP Commission in its Order dated 15.11.2018 has itself noted that the UP Discoms would incur substantial Opex cost (to be paid to EESL) towards implementation of Smart Metering Rollout Plans. Hence, there is no reason to now disallow the said cost, which is a Statutory expense and has to be mandatorily incurred by the Appellants.

(b) The approach of compensating the Opex cost with likely savings in billing and collection efficiency was not envisaged in the Tariff Petition. Further in the petition the Hon'ble Commission was requested to approve the OPEX Cost incurred for this scheme. Moreover, the tariff is already being determined based on 100% collection efficiency, despite the actual percentage being substantially lower. Therefore, even if billing and collection efficiency increases by installation of smart meters, the same will not have any impact on the tariff of the Discoms.

(c) Improvement in the collection efficiency with the implementation of Smart Meters may not be in account of Licensees since the Hon'ble Commission already considers 100% collection efficiency.

4.6.19. The following table summarises the cost of Smart Meters under Opex Model for the Petitioner for FY 2022-23:

Table 4-17 Smart metering OPEX for FY 2022-23

Particulars	Smart Meters installed till March 2022	Smart Meters to be installed till March 2023	Rate (Rs. /meter/month including GST @18%)	Projected OPEX (Rs. Crore)
FY 2022-23	3,75,849	21,68,467	101.42	139.33

4.6.20. Further it is pertinent to highlight that under Revamped Distribution Sector Scheme, the Petitioner will install 15,28,467 smart meters and while already existing EESL scheme the petitioner will install 6,40,000 smart meters

4.6.21. The Hon'ble Commission is requested to approve the smart metering OPEX estimated in the above Table.

4.6.22. Based on the above submission, the summary of the Operation & Maintenance expenses (O&M) projected for FY 2022-23 are shown in the table below:

Table 4-18 Operation & Maintenance expenses projected for FY 2022-23 (Rs. Crore)

Particulars	Projected
Repair & Maintenance expenses	406.19
Employee expenses	1,189.98
Administrative and General expenses	338.50
Gross O&M Expenses	1,934.68
Less:	

Particulars	Projected
Employee expenses capitalized	644.56
Administrative and General expenses capitalized	-
Gross expenses Capitalized	644.56
Smart Meter Opex	139.33
Net O&M Expenses	1,429.44

4.7. Capital Investment, Capitalisation and Financing

4.7.1. Implementation_of Revamped Distribution Sector Scheme in Uttar Pradesh:

The Central Government has approved the Revamped Distribution Sector Scheme, a Reforms-based and Results-linked Scheme with a five-year budget of Rs. 3,03,758 Crore, to improve the quality, reliability, and affordability of power supply to consumers through a financially sustainable and operationally efficient distribution sector. The key objective of the scheme is to reduce AT& C losses to 12-15 percent across India, and the ACS-ARR gap to zero, by increasing operational efficiencies and financial sustainability of all DISCOMs/Power Departments, excluding private sector DISCOMs.

The Scheme is specifically for modernization and loss reduction using proper utilization of funds for works on Pre-Paid Smart Metering, System Metering, and Distribution Infrastructure. Many Steps have also been taken for automation and use of Information Technology (IT) in the Distribution Sector under IPDS and R-APDRP which includes the establishment of Data Centres, GIS mapping of consumers, Asset Mapping, Online energy auditing & accounting, Consumer care centers, AMI meters on feeders & Distribution Transformers, provision of Smart Metering to reduce losses etc. in urban areas.

The Revamped Reforms-based and Results-linked, Distribution Sector Scheme seeks to improve the operational efficiencies and financial sustainability, by providing financial assistance to DISCOMs for strengthening of supply infrastructure based on meeting pre-qualifying criteria and achieving basic minimum benchmarks in reforms.

The Revamped Distribution Sector Scheme is covered under two parts namely as Part-A covers metering & distribution infrastructure works and Part-B covers training & capacity building and other enabling & supporting activities.

Part A – Metering & Distribution Infrastructure Works:

- Facilitating in installing prepaid smart meters for all consumers along with associated AMI, communicable meters for DTs & Feeders, ICT including Artificial Intelligence (AI), Machine Learning (ML), etc. based solutions for power Sector and a unified billing and collection system;
- Distribution infrastructure works as required for strengthening and modernizing the system as well as measures for loss reduction. The infrastructure strengthening works will include separation of Agriculture feeders to enable implementation of the KUSUM scheme, Aerial Bunch cables and HVDS for loss reduction, replacement of HT/LT lines as required, construction of new/ upgradation of substations, SCADA and DMS system etc. Each DISCOM/ State will draw up the scheme according to its requirement with the end objective of reducing losses and ensuring 24 x 7 supply.

Part B - Training & Capacity Building and other Enabling & Supporting Activities:

Supporting and enabling components, such as Nodal Agency fee, enabling components of MoP (communication plan, publicity, consumer awareness, consumer survey and other associated

measures such as third party evaluation etc.), up-gradation of Smart Grid Knowledge Centre, training and capacity building, awards and recognitions etc.

The proposal of UP states based on present scenarios are followings-

- 1 ACS-ARR gap with revenue on an accrual basis to be zero at the end of FY 2024 -25
- 2 AT&C Loss target to be in line with the trajectory proposed
- 3 DPRs to be rationalized keeping in view that the proposed works for loss reduction are targeted in high loss areas in order of priorities
- 4 Liquidation of outstanding subsidy to be ensured as per scheme guidelines
- 5 Consumer, DTR, and Feeder Smart Metering timelines to be as per scheme guidelines

As per the action plan the Discoms has considered the capital expenditure to be incurred (net of Grants) for FY 2022-23 towards the Loss Reduction and Modernization works. Further, the tendering process of smart meters is in progress and it is expected that the same will be finalized by the end of June 2022. Thus, the expenses regarding Smart meter have been claimed under Opex mode as per the existing monthly rate discovered. The actual rate when discovered under the current tendering process same shall be informed to the Hon'ble Commission.

4.7.2. Implementation of ADB funded Scheme in the State Discoms

Uttar Pradesh Power Distribution Network Rehabilitation Project is in progress under ADB funding. Under the program electricity distribution network in rural habitations improvement will consist of the replacement of existing bare conductors with aerial bundle conductors (ABC) in rural low voltage distribution networks. In addition to this, system for separating electricity distribution for agriculture consumers from residential consumers established will be separated. The Discoms has considered the capex in this context for the approval of the Hon'ble Commission during FY 2021-22 and FY 2022-23.

- 4.7.3. Regulation 44 of UPERC (Multi Year Tariff for Distribution & Transmission) Regulations, 2019 provides for consideration of capital expenditure for the purpose of determination of ARR for the Control Period. Accordingly, the Petitioner has projected the capital expenditure to be undertaken in FY 2022-23 in this Petition. The details of proposed Capital Expenditure for FY 2022-23 is depicted in the table below:

Table 4-19 Proposed Capital Expenditure details for FY 2022-23 (Rs Crore)

Particulars	Investments	Capitalisation
Other Schemes (net of Consumer Contribution and Grant)	450.51	1364.67
ADB (net of Consumer Contribution and Grant)	568.47	227.39
Revamp Scheme (net of Consumer Contribution and Grant)	515.61	206.24
Total excluding Interest and employee capitalization (A)	1,534.60	1,798.30
Add: Employee Capitalization (B)	644.56	644.56
Add: Interest Capitalization (C)	198.33	198.33
Total (D= A+B+C)	2,377.49	2,641.19

- 4.7.4. It is pertinent to highlight that the Investment considered for FY 2022-23 is the net investments (excluding grants and consumer contributions). The Petitioner has separately provided the amount of consumer contribution and grant for FY 2022-23 in relevant section of this petition and in tariff formats as well.
- 4.7.5. Based on the methodology adopted by Hon'ble Commission, 40% of the investments made during FY 2022-23 is capitalized in the same year. The Petitioner has also considered employee expense capitalization and Interest capitalization during FY 2022-23 as per the methodology adopted by Hon'ble Commission. Considering the Capital Work in Progress (CWIP), investment during the year and capitalisations, the Petitioner has computed the closing CWIP for FY 2022-23.
- 4.7.6. Considering the aforementioned submissions, the capitalisation and capital work in progress for FY 2022-23 are shown in the Table below:

Table 4-20 Capitalization and WIP of Investment for FY 2022-23 (Rs Crore)

Particulars	Derivation	Projected
Opening WIP as on 1st April 2022	A	2,961.16
Investments	B	1,568.96
Employee Expenses capitalization	C	610.20
A&G Expenses Capitalisation	D	-
Interest Capitalisation on Interest on long term loans	E	196.14
Total Investments	F= A+B+C+D+E	5,336.45
Transferred to GFA (Total Capitalisation)	G	2639.00
Closing WIP	H=F-G	2,697.45

Notes: Opening Balances for FY 2022-23 are as per closing balances of FY 2021-22.

- 4.7.7. The Petitioner has considered a normative debt: equity ratio of 70:30. Considering this approach, 70% of the capitalisation (excluding consumer contribution and grants) undertaken in FY 2022-23 has been considered to be financed through loan and balance 30% has been considered to be financed through equity contributions. The portion of capital expenditure financed through consumer contribution, capital subsidies and grants has been separated as the depreciation and interest thereon would not be charged to the beneficiaries.
- 4.7.8. The table below summarizes the amounts considered towards consumer contributions, capital grants and subsidies for FY 2022-23:

Table 4-21 Consumer Contribution, Capital Grants & Subsidies (Rs Crore)

Particulars	Projected
Opening Balance of Consumer Contributions, Grants and Subsidies towards Cost of Capital Assets	137.36
Additions during the year includes consumer contribution and grants	-
Less: Amortisation on consumer contribution part only	-

Particulars	Projected
Closing Balance	137.36

- 4.7.9. Thus, the Petitioner submits that the capital investments proposed during FY 2022-23 after netting off the capital investment through deposit works, has been considered to be funded through debt and equity of 70:30, as depicted in the table below:

Table 4-22 Financing of the Capital Investment (Rs Crore)

Particulars	Derivation	Projected
Investment / Capitalisation (Asset put to use) net of CCG	A	2641.19
Less:		
Consumer Contribution and grants	B	-
Investment funded by debt and equity	C=A-B	2,641.19
Debt Funded	70%	1,848.84
Equity Funded	30%	792.36

4.8. Interest & Finance Charges

Interest on Long Term Loan

- 4.8.1. The Hon'ble Commission in its previous Tariff and True-Up orders had considered a normative tariff approach with a debt equity ratio of 70:30. Considering this approach, 70% of the capital expenditure (asset put to use) undertaken in any year was financed through loan and balance 30% has been financed through equity contributions. The portion of capital expenditure financed through consumer contributions, capital subsidies and grants are separated and the depreciation, interest and return on equity thereon was not charged to the consumers. Subsequently, the financing of the capital investment was worked out based on the debt equity ratio of 70:30 and allowable depreciation was considered as normative loan repayment.
- 4.8.2. The Petitioner has worked-out the interest on long term loan based on the same philosophy.
- 4.8.3. Allowable depreciation for the year has been considered as normative loan repayment. The weighted average interest rate for FY 2022-23 has been considered as per audited accounts for computing the eligible interest expenses.
- 4.8.4. Considering the above, the gross interest on long term loan has been computed below. The interest capitalisation has been considered at the same rate as for FY 2022-23. The computations for interest on long term loan are shown in table below:

Table 4-23 Interest on Long Term Loan for FY 2022-23 (Rs Crore)

Particulars	Projected
Opening Loan	7,534.48
Loan Additions (70% of Investments)	1,848.84
Less: Repayments (Depreciation allowable for the year)	907.07
Closing Loan Balance	8,476.25
Weighted Average Rate of Interest	10.91%
Interest on long term loan	873.39
Less: Interest Capitalized	198.33
Net Interest on Loan term loan	675.05

Interest on Consumer Security Deposits

- 4.8.1. The opening balance of long term loan has been considered equivalent to the closing loan balance for previous year as per the present Petition.
- 4.8.2. As per Regulation 25.2 (c) of UPERC (Multi Year Tariff for Distribution & Transmission) Regulations, 2019, Interest shall be allowed on consumer security deposits as per the provisions of the Electricity Supply Code, 2005 and its subsequent amendments/ addendums and the new Regulations made after repeal of the same.
- 4.8.3. The opening balances of security deposits have been considered as per closing figures of FY 2021-22 and additions during the year FY 2022-23 is estimated as per the % increase in Revenue Assessment for FY 2022-23 w.r.t FY 2021-22. Accordingly, Petitioner has computed the interest on security deposit for FY 2022-23, which is shown in the Table below.

Table 4-24 Interest on Security deposit for FY 2022-23 (Rs Crore)

Particulars	Projection
Closing Balance for Security Deposit	693.55
Rate of Interest (RBI bank Rate as on 01.04.2021)	4.25%
Interest on Security Deposits	29.05

4.9. Interest on Working Capital

- 4.9.1. The Petitioner has determined Interest on Working Capital for FY 2022-23 as per Regulation 25.2 (a) & 25.2 (b) of UPERC (Multi Year Tariff for Distribution & Transmission) Regulations, 2019. The Regulation 25.2 (a) & 25.2 (b) is quoted below:

“(a)The working capital requirement of the Distribution Business shall cover:

- (v) Operation and maintenance expenses for one month;*
- (vi) Maintenance spares at 40% of the R&M expenses for two months; and*
- (vii) One and half month equivalent of the expected revenue from charges for use of Distribution system at the prevailing Tariff (excluding Electricity Duty);*

minus

(viii) Amount held as security deposits from Distribution System Users:

Provided that for the purpose of Truing-Up for any year, the working capital requirement shall be re-computed on the basis of the values of components of working capital approved by the Commission in the Truing- Up;

(b) Rate of interest on working capital shall be simple interest and shall be equal to the SBI MCLR (1 Year) on October 01, 2019 plus 250 basis points:

Provided that for the purpose of Truing-Up for any year, simple interest on working capital shall be allowed at a rate equal to the weighted average SBI MCLR (1 Year) prevailing during the concerned Year plus 250 basis points.”

4.9.2. The Interest on Working Capital as per UPERC (Multi Year Tariff for Distribution & Transmission) Regulations, 2019, is determined in the table below:

Table 4-25 Interest on Working Capital for FY 2022-23 (Rs. Crore)

Particulars	Projected
O&M expenses for 1 month	107.51
One and Half month Month equivalent of expected revenue	1,949.67
Maintenance spares @ 40% of R&M expenses for two months	27.08
Less: Security deposits from consumers, if any	693.55
Total Working Capital Requirement	1,390.71
State Bank Advance Rate (SBAR) %	10.65%
Interest on Working Capital	148.11

4.9.3. The following table summarises the Interest and Finance charges projected by the Petitioner for FY 2022-23.

Table 4-26 Interest and Finance Charges for FY 2022-23 (Rs Crore)

Particulars	Projected
A: Interest on Long Term Loans	
Gross Interest on Long Term Loan	873.39
Less: Interest Capitalisation	198.33
Net Interest on Long Term Loans	675.05
B: Finance and Other Charges	
Interest on Consumer Security Deposits	29.05
Bank/ Finance Charges	47.43
Total Finance Charges	76.48
C: Interest on Working Capital	148.11
Total (A+B+C)	899.64

4.10. Depreciation

- 4.10.1. The basis of determination of depreciation is stated in Regulation 21.1 of UPERC (Multi Year Tariff for Distribution & Transmission) Regulations, 2019. The Regulation 21.1 is quoted below:

“21.1 The Licensee, shall be permitted to recover Depreciation on the value of fixed assets used in their respective businesses, computed in the following manner:

(a) The approved original cost of the fixed assets shall be the value base for calculation of Depreciation:

Provided that the Depreciation shall be allowed on the entire capitalised amount of the new assets after reducing the approved original cost of the retired or replaced or de-capitalised assets.

(b) Depreciation shall be computed annually based on the Straight- Line Method at the rates stipulated in the Annexure- A to these Regulations.

Provided that the Licensee shall ensure that once the individual asset is depreciated to the extent of seventy percent, remaining depreciable value as on 31st March of the year closing shall be spread over the balance Useful Life of the asset including the Extended Life, as per submission of the Licensee and approved by the Commission.

(c) The salvage value of the asset shall be considered at 10% of the allowable capital cost and Depreciation shall be allowed up to a maximum of 90% of the allowable capital cost of the asset:

Provided that land owned shall not be treated as a Depreciable asset and shall be excluded while computing Depreciation

Provided further that Depreciation shall be chargeable from the first year of commercial operation.

(d) Depreciation shall not be allowed on assets funded by Consumer Contributions or Subsidies/ Grants/ Deposit works.”

- 4.10.2. The Petitioner has computed the allowable depreciation expense on the GFA base for FY 2022-23 as per the SLM approach and at the rates approved by the Hon’ble Commission in UPERC (Multi Year Tariff for Distribution & Transmission), 2019. The Petitioner has computed the depreciation only on the depreciable asset base and has excluded the non-depreciable assets such as land, land rights, etc. The addition during the year is considered as net additions excluding Consumer Contribution and Grant.

4.10.3. Accordingly, the Petitioner has computed depreciation for FY 2022-23 as shown in table below:

Table 4-27 Gross Allowable Depreciation for FY 2022-23 (Rs Crore) part A

GROSS ALLOWABLE DEPRECIATION FOR ASSETS BEFORE 01.04.2020 OF MVVNL FOR FY 2022-23 (Rs. CRORE) PART A								
Sr. No	Particulars	Opening GFA (as on 31.3.2022)	Cumulative Depreciation	Deduction to GFA	Closing GFA	Average GFA	Depreciation Rate	Allowable Gross Depreciation
1	Land & Land Rights	1.00	-		1.00	1.00	0.00%	-
2	Buildings	193.03	61.19		193.03	193.03	3.34%	6.45
3	Other Civil Works	13.30	4.22		13.30	13.30	3.34%	0.44
4	Plant & Machinery	2,984.67	1,270.41		2,984.67	2,984.67	5.28%	157.59
5	Lines, Cables, Network etc.	8,728.42	3,108.86		8,728.42	8,728.42	5.28%	460.86
6	Vehicles	5.64	2.12		5.64	5.64	6.33%	0.36
7	Furniture & Fixtures	11.28	4.25		11.28	11.28	6.33%	0.71
8	Office Equipments	95.40	35.91		95.40	95.40	6.33%	6.04
9	Capital Expenditure on Assets not belonging to utility	-	-		-			
10	Total Fixed Assets	12,032.74	4,486.96		12,032.74	12,032.74	5.26%	632.45
11	Non depreciable assets (Land & Land Rights)	1.00	-					
12	Depreciable assets	12,031.74	4,486.96					

Table 4-28 Gross Allowable Depreciation for FY 2022-23 (Rs Crore) Part B

GROSS ALLOWABLE DEPRECIATION FOR ASSETS AS ON 01.04.2020 OF MVVNL FOR FY 2022-23 (RS. CRORE) PART B									
S.No.	Particulars	Opening GFA as on 1.4.22	Addition to GFA	Deduction of Grants	Deduction to GFA	Closing GFA	Average GFA	Depreciation Rate	Allowable Gross Depreciation
1	Land & Land Rights	-	-	-	-	0.00	0.00	0.00%	0.00
2	Buildings	104.56	42.37	-	-	146.93	125.74	3.34%	4.20
3	Other Civil Works	7.20	2.92	-	-	10.12	8.66	3.34%	0.29
4	Plant & Machinery	1,616.64	655.14	-	-	2,271.78	1,944.21	5.28%	102.65
5	Lines, Cables, Network etc.	4,727.73	1,915.89	-	-	6,643.63	5,685.68	5.28%	300.20
6	Vehicles	3.05	1.24	-	-	4.29	3.67	6.33%	0.23
7	Furniture & Fixtures	6.11	2.47	-	-	8.58	7.34	6.33%	0.46
8	Office Equipments	51.67	20.94	-	-	72.61	62.14	6.33%	3.93
9	Capital Expenditure on Assets not belonging to utility	-	-	-	-	0.00			
10	Total Fixed Assets	6,517.51	2,641.19	-	-	9,158.70	7,838.11		411.98
11	Non depreciable assets (Land & Land Rights)	0.54	0.22	-	-		0.54		0
12	Depreciable assets	6,516.97	2,640.97	-	-	9,157.94	7,837.45	5.26%	411.98

4.10.4. The Petitioner has reduced the equivalent depreciation on the assets created out of consumer contributions, capital grants and subsidies from the gross allowable depreciation for FY 2022-23.

4.10.5. Thus, the allowable depreciation for FY 2022-23 is shown in the table below:

Table 4-29 Net Allowable Depreciation for FY 2022-23 (Rs Crore)

Particulars	Projected
Gross Allowable Depreciation	1,044.43
Less: Equivalent amount of depreciation on assets acquired out of the Consumer Contribution and Grant	137.36
Net Allowable Depreciation	907.07

4.11. Provision for Bad and Doubtful Debts

4.11.1. The Petitioner has determined bad & doubtful debt as per Regulation 46 of UPERC (Multi Year Tariff for Distribution & Transmission) Regulations, 2019. The Regulation 46 is quoted below:

“For any Year, the Commission may allow a provision for write off of bad and doubtful debts up to 2% of the amount shown as Revenue Receivables from sale of electricity in the audited accounts of the Distribution Licensee for that Year or the actual write off of bad debts, whichever is less....”

4.11.2. Accordingly, Petitioner has computed provision for bad and doubtful debts at 2% of the revenue receivables.

Table 4-30 Allowable Provision for Bad and Doubtful Debts for FY 2022-23 (Rs Crore)

Particulars	Projected
Total Revenue Receivables from Retail Sales	13,012.08
% of Provision for Bad and Doubtful Debts	2%
Bad and Doubtful Debts as per Regulation	260.24
Bad Debt Projected	260.24

4.12. Return on Equity

4.12.1. The Regulation 22 of the MYT (Distribution and Transmission) Regulations, 2019 provides for return on equity @15% post-tax per annum for Distribution Licensee as specified below:

“22 Return on equity

22.1 Return on equity shall be computed in Rs. terms on equity base at the rate of 14.5% post-tax per annum for the Transmission Licensee and at the rate of 15% post-tax per annum for Distribution Licensee respectively as determined in accordance with Regulation 20:

Provided that assets funded by Consumer Contribution / Deposit works, Capital Subsidies / Grants and corresponding Depreciation shall not form part of the Capital Cost. Actual Equity infused by the Licensee as per book value shall be considered and shall be used for computation in these Regulations.”

4.12.2. The Petitioner has considered closing equity of FY 2021-22 as opening for FY 2022-23. Equity addition during the year has been considered 30% of Capitalisation during the year net of consumer contribution, capital subsidies/ grants.

4.12.3. The Return on Equity (RoE) for FY 2022-23 is shown below:

Table 4-31 Return on Equity (RoE) for FY 2022-23 (Rs Crore)

Particulars	Revised Estimate
Opening Equity	4,163.84
Net additions during the year (30% of Asset put to use)*	792.36
Equity (Closing Balance)	4,956.20
Rate of Return on Equity (%)	15.00%
Allowable Return on Equity	684.00

* net of Grants and consumer contribution

4.13. Revenue from Sale of Power

- 4.13.1. For projecting the Fixed Charges for FY 2022-23, the average load of March 2022 and March 2023 has been considered.
- 4.13.2. It is submitted that for HV category consumers, the Petitioner has considered the billable load/Demand at 75% of the contracted load/demand considering it to be as maximum load/demand.
- 4.13.3. Category-wise revenue worked-out based on above assumption and projected billing determinants are shown in the Tables below:

Table 4-32 Category-wise Revenue and ABR for FY 2022-23 (Rs Crore) at existing tariff

Consumer Category/ Sub-Category	Consumers	Load (kW)	Projected Sales (MU)	Fixed Charges	Variable Charges	Projected Revenue (Rs Cr)	Average Billing Rate (Rs/Unit)
LMV-1: Domestic Light, Fan & Power							
Life Line Consumers (both Rural and Urban) (up to 100 kWh/month)	5,082,240	5,002,874.99	5,537.49	297	1,661	1,958	3.54
Dom: Rural Schedule (unmetered)	98,926	98,508.83	255.33	89	-	89	3.47
Dom: Rural Schedule (metered) other than BPL	787,918	840,880.63	921.32	87	351	437	4.75
0-100 kWh/month	488,876	457,439.06	226.51	47	196	243	4.16
101-150 kWh/month	196,417	176,584.93	325.53	18	58	76	5.05
151-300 kWh/month	61,426	161,088.35	152.10	17	58	74	6.44
301-500 kWh/month	37,212	42,044.03	183.65	4	33	37	6.23
Above 500 kWh/Month (starting from 501 unit)	3,987	3,724.26	33.53	0	6	6	6.40
Dom: Supply at Single Point for Bulk Load	93	37,081.35	62.81	5	44	49	7.80
Other Metered Domestic Consumers other than BPL	2,162,717	4,420,197.39	5,193.54	564	3,003	3,568	6.87
0-150 kWh/month	1,306,401	2,519,512.51	1,739.94	322	1,805	2,126	6.48
151-300 kWh/month	404,898	972,443.43	941.97	124	615	740	7.21
301-500 kWh/month	289,377	884,039.48	1,400.89	113	486	599	8.01
Above 500 kWh/Month (starting from 501 unit)	162,040	44,201.97	1,110.74	6	97	103	7.41
Sub Total	8,131,895	10,399,543.19	11,970.49	1,042	5,059	6,101	5.10
LMV-2: Non Domestic Light, Fan & Power	-	-	11,970.49			-	-

Consumer Category/ Sub-Category	Consumers	Load (kW)	Projected Sales (MU)	Fixed Charges	Variable Charges	Projected Revenue (Rs Cr)	Average Billing Rate (Rs/Unit)
Non Dom: Rural Schedule (unmetered)	-	-	-	-	-	-	-
Non Dom: Rural Schedule (metered)	66,520	232,681.00	455.26	30	250	280	6.16
Non Dom: Private Advertising /Sign Post/Sign Board/GlowSign	6	10.30	5.60	-	10	10	18.00
Non Dom: Other Metered Non-Domestic Supply	344,286	906,034.94	1,264.06	404	987	1,391	11.01
Load upto 2 kW	223,786	398,655.37	568.83	154	436	590	10.37
Upto 300 kWh / month	168,958	300,984.81	273.04	116	353	469	9.97
301 – 1000 kWh / month	53,709	95,677.29	278.73	37	80	117	12.30
Above 1000 kWh/Month	1,119	1,993.28	17.06	1	3	4	10.87
Above 2 kW to 4 kW	86,071	244,629.43	391.86	112	305	417	10.63
Upto 300 kWh / month	64,554	183,472.08	195.93	84	205	289	10.57
301 – 1000 kWh / month	19,796	56,264.77	164.58	26	91	116	10.79
Above 1000 kWh/Month	1,721	4,892.59	31.35	2	9	12	10.84
Above 4 kW	34,429	262,750.13	303.37	139	246	385	12.68
Upto 300 kWh / month	20,657	118,237.56	78.88	62	96	159	12.35
301 – 1000 kWh / month	10,329	73,570.04	97.08	39	75	113	12.77
Above 1000 kWh/Month	3,443	70,942.54	127.42	37	75	113	13.09
Sub Total	410,812	1,138,726.24	1,724.93	434	1,247	1,682	9.75
LMV-3: Public Lamps	-	-	1,724.93			-	-
Unmetered	182	6,468.50	22.65	35	-	35	15.60
Unmetered - Gram Panchayat	119	1,699.50	5.92	6	-	6	10.85
Unmetered - Nagar Palika & Nagar Panchayat	55	3,972.25	12.06	23	-	23	18.97
Unmetered - Nagar Nigam	8	796.75	4.67	6	-	6	12.91
Metered	1,103	120,103.10	308.19	34	258	292	9.49
Metered - Gram Panchayat	81	1,012.04	1.44	0	1	1	9.11
Metered - Nagar Palika & Nagar Panchayat	707	28,205.54	76.35	8	61	69	9.06
Metered - Nagar Nigam	315	90,885.52	230.39	26	196	222	9.63
Sub Total	1,284	126,571.60	330.84	70	258	328	9.90
LMV-4: Light, fan & Power for Institutions	-	-	330.84			-	-
Inst: Public	24,979	120,169.96	214.23	42	179	222	10.34
Inst: Private	3,284	33,192.60	51.10	15	47	62	12.15
Sub Total	28,263	153,362.56	265.33	58	226	284	10.69
LMV-5: Private Tube Wells/ Pumping Sets	-	-	265.33			-	-
Consumers getting supply as per "Rural Schedule"	231,011	1,254,765.87	2,108.35	339	15	355	1.68
PTW: Rural Schedule (unmetered) (Total)	227,588	1,231,088.00	2,031.15	337	-	337	1.66
PTW: Rural Schedule (unmetered)	227,588	1,231,088.00	2,031.15	337	-	337	1.66
PTW: Rural Schedule (Energy Efficient Pumps) (Unmetered)	-	-	-	-	-	-	-
PTW: Rural Schedule (metered) (Total)	3,423	23,677.87	77.21	2	15	18	2.32
PTW: Rural Schedule (metered)	3,423	23,677.87	77.21	2	15	18	2.32
PTW: Rural Schedule (Energy Efficient Pumps) (metered)	-	-	-	-	-	-	-
Consumers getting supply as per "Urban Schedule (Metered Supply)"	6,025	27,014.19	84.88	5	51	56	6.62
PTW: Urban Schedule (metered)	6,025	27,014.19	84.88	5	51	56	6.62
Sub Total	237,037	1,281,780.06	2,193.23	344	66	411	1.87

Consumer Category/ Sub-Category	Consumers	Load (kW)	Projected Sales (MU)	Fixed Charges	Variable Charges	Projected Revenue (Rs Cr)	Average Billing Rate (Rs/Unit)
LMV 6: Small and Medium Power upto 100 HP (75 kW)	-	-	2,193.23			-	-
Consumers getting supply as per "Rural Schedule"	10,137	112,350.37	138.72	27	96	123	8.88
Up to 1000 kWh / month	7,896	101,378.20	64.94	24	44	68	10.47
Up to 2000 kWh / month	1,914	6,934.52	28.63	2	20	21	7.42
For above 2000 kWh / month	327	4,037.65	45.15	1	33	34	7.52
Consumers getting supply other than "Rural Schedule"	29,296	314,075.60	356.17	81	271	352	9.89
Up to 1000 kWh / month	18,750	94,222.68	90.76	24	66	91	9.99
Up to 2000 kWh / month	7,052	109,926.46	108.99	28	81	109	10.02
For above 2000 kWh / month	3,494	109,926.46	156.42	28	124	152	9.73
Sub Total	39,433	426,425.97	494.89	108	368	475	9.60
LMV-7: Public Water Works	-	-	494.89			-	-
Consumers getting supply as per "Rural Schedule"	1,158	24,983.33	96.82	10	77	87	9.00
Rural Schedule: Jal Nigam	440	10,005.19	35.69	4	28	32	9.09
Rural Schedule: Jal Sansthan	267	6,189.65	27.04	3	22	24	8.89
Rural Schedule: Other PWWs	451	8,788.50	34.09	4	27	31	9.00
Consumers getting supply other than "Rural Schedule"	2,773	72,695.22	338.05	32	291	323	9.55
Urban Schedule: Jal Nigam	87	8,605.46	17.95	4	15	19	10.73
Urban Schedule: Jal Sansthan	1,099	50,469.77	258.44	22	222	245	9.47
Urban Schedule: Other PWWs	1,586	13,619.98	61.66	6	53	59	9.58
Sub Total	3,930	97,678.55	434.87	42	368	410	9.43
LMV-8: State Tube Wells & Pump Canals upto 100 HP	-	-	434.87			-	-
Metered	9,253	69,192.96	536.67	32	456	489	9.11
Metered STW	9,253	69,192.96	536.67	32	456	489	9.11
Unmetered	1,967	28,619.75	252.26	228	-	228	9.03
Unmetered:STW/Panch.Raj/WB/ID/P. Canals/LI upto 100 BHP	1,966	28,591.50	252.16	228	-	228	9.03
Unmetered: Laghu Dal Nahar above 100 BHP	1	28.25	0.10	0	-	0	23.39
Sub Total	11,220	97,812.71	788.93	260	456	717	9.08
LMV-9: Temporary Supply	-	-	788.93			-	-
Metered	6,609	20,841.66	22.11	7	20	27	12.12
Metered TS: Individual residential consumers	983	2,359.41	1.42	1	1	2	11.89
Metered TS: Others	5,626	18,482.25	20.69	6	19	25	12.14
Unmetered	3	3.00	0.54	0	-	0	0.43
Unmetered TS: Ceremonies	-	-	-	-	-	-	-
Unmetered TS: Temp shops	3	3.00	0.54	0	-	0	0.43
Sub Total	6,612	20,844.66	22.65	7	20	27	11.85
LMV-10: Departmental Employees	23,078	74,143.26	147.43	75	-	75	5.10
Sub Total	23,078	74,143.26	147.43	75	-	75	5.10
LMV-11: Electrical Vehicles	-	-	147.43			-	-
Multi Story Buildings	-	-	-	-	-	-	-
LMV-1b	-	-	-	-	-	-	-
HV-1b	-	-	-	-	-	-	-
Public Charging Station	22	3,820.63	3.94	-	3	3	7.34
LT	20	523.93	0.36	-	0	0	7.70
HT	2	3,296.70	3.58	-	3	3	7.30
Sub Total	22	3,820.63	3.94	-	3	3	7.34
HV-1: Non-Industrial Bulk Loads	-	-	3.94			-	-

Consumer Category/ Sub-Category	Consumers	Load (kW)	Projected Sales (MU)	Fixed Charges	Variable Charges	Projected Revenue (Rs Cr)	Average Billing Rate (Rs/Unit)
Rural Schedule	42	58,240.24	778.24	-	-	-	-
Rural Schedule - Supply at 11 kV	38	28,727.55	774.76	-	-	-	-
Rural Schedule - Supply above 11 kV	4	29,512.68	3.48	-	-	-	-
Urban Schedule	1,368	833,268.66	38.25	-	-	-	-
Urban Schedule - Supply at 11 kV	1,362	833,268.66	34.51	-	-	-	-
Urban Schedule - Supply above 11 kV	5	-	3.74	-	-	-	-
Sub Total	1,410	891,508.90	816.49	-	-	-	-
Commercial Loads / Private Institutions / Non-Domestic Bulk Power with contracted Load 75 kW & above and getting supply at single point on 11 kV & above voltage level.	705	356,603.56	408.25	135	347	482	11.82
Supply at 11 kV	352	353,037.52	404.64	134	344	478	11.82
Supply above 11 kV	352	3,566.04	3.61	1	3	4	11.83
Public Institutions, Registered Societies, Residential Colonies / Townships, Residential Multi-Storied Buildings including Residential Multi-Storied Buildings with contracted load 75 kW & above and getting supply at Single Point on 11 kV & above voltage levels	705	534,905.34	408.25	180	322	502	12.29
Supply at 11 kV	599	529,556.29	404.64	178	319	497	12.29
Supply above 11 kV	106	5,349.05	3.61	2	3	4	12.39
Sub Total	1,410	891,508.90	816.49	315	669	984	12.05
HV-2: Large and Heavy Power above 100 BHP (75 kW)	-	-	816.49	-	-	-	-
HV2 Urban Schedule: Supply at 11 kV	1,933	583,841.29	1,170.07	154	829	983	8.40
HV2 Urban Schedule: Supply above 11 kV & upto 66 kV	39	61,074.47	170.14	16	115	131	7.70
HV2 Urban Schedule: Supply above 66 kV & upto 132 kV	14	44,904.96	39.31	11	25	36	9.10
HV2 Urban Schedule: Supply above 132 kV	2	15,086.93	36.61	4	22	26	7.06
HV2 Rural Schedule: Supply at 11 kV	393	153,032.25	305.19	37	200	238	7.79
Sub Total	2,380	857,939.89	1,721.34	221	1,192	1,413	8.21
HV-3: Railway Traction	-	-	1,721.34	-	-	-	-
HV3 Supply at and above 132 kV	-	-	-	-	-	-	-
HV3 Supply below 132 kV	-	-	-	-	-	-	-
HV3 For Metro traction	2	9,671.05	31.70	3	23	26	8.12
Sub Total	2	9,671.05	31.70	3	23	26	8.12
HV-4: Lift Irrigation & P. Canals above 100 BHP (75 kW)	-	-	31.70	-	-	-	-
HV4 Supply at 11kV	21	24,370.82	53.30	8	45	53	9.91
HV4 Supply above 11kV & upto 66kV	14	5,983.68	18.69	2	16	17	9.36
HV4 Supply above 66 kV & upto 132kV	-	-	-	-	-	-	-
Sub Total	35	30,354.50	71.99	9	61	70	9.77
Extra State Consumer	1	5,000.00	8.78	-	7	7	7.83
Bulk Supply Consumer	-	-	-	-	-	-	-
Grand Total	8,897,414	15,615,183.76	21,027.82	2,988	10,024	13,012	6.19

- 4.13.4. It is further submitted that the overall Fixed charge and variable charge component of the revenue from sale of power is approx. 23% from fixed charge and approx. 77% from variable charge at the UPPCL level.

4.14. Non-Tariff Incomes

- 4.14.1. The Petitioner has estimated the non-tariff incomes for FY 2022-23 as shown in the table below.

Table 4-33 Non-Tariff Income for FY 2022-23 (Rs Crore)

Particulars	Projected
Total Non-Tariff Income	38.06

4.15. GoUP Subsidy

- 4.15.1. The Govt. subsidy for FY 2022-23 yet to be approved in state budget for FY 2022-23. As such this is not available at present. Therefore for this petition licensee has taken same provisional value as budgeted for FY2021-22 by GoUP. Further, it is submitted that as per the Section 65 of electricity Act, 2003 the GoUP provides the Government subsidy details directly to the Hon'ble commission.
- 4.15.2. The Hon'ble commission may substitute this provisional amount of Government subsidy by the actual subsidy details communicated by the Government of UP to the Hon'ble Commission for FY 2022-23 and the revenue gap shall be modified accordingly.
- 4.15.3. In the previous tariff Order the Hon'ble Commission has directed the Licensees to submit the road map for DBT in transparent manner. Accordingly, the petitioner has explained vide letter 421/RAU/ARR 2022-23 dated 12th October, 2021 (Annexure-1) to the Hon'ble Commission that desired roadmap has already been communicated by the GoUP vide letter dated 26.03.2021 to the Commission wherein GoUP has described the roadmap as below:
- The GoUP has approved the mechanism of mentioning the rate of Govt. Subsidy as decided by GoUP in the monthly bills of consumers and making adjustment of the subsidy amount in the billed amount of consumers.
 - The quarterly account of the utilization of Govt. subsidy provided in advance as per the actual per unit/per BhP/per KW consumption for subsidized consumers categories/sub-categories/slabs will be submitted by UPPCL to GoUP within one month of the completion of every quarter.
 - On the basis of quarterly account the amount of subsidy for next quarter will be revised after adjusting the amount of remaining subsidy or the amount of additional subsidy required from the Govt.
 - The above process will start from the quarter April-June, 2022.
- 4.15.4. On the basis of the above roadmap, the details of the per unit rate of the GoUP subsidy may be mentioned in the Tariff Order separately.
- 4.15.5. Accordingly, the Petitioner submits that it has complied the directive issued by the Hon'ble Commission in Tariff order 29.07.2021 regarding the scheme for transfer of subsidy in a transparent manner with the approval of the State Government, which is to be implemented with effect from 1st April 2022.

- 4.15.6. Above table also highlights that if cross subsidy is computed on full cost tariff including slab wise subsidy, this will project true picture of cross subsidiation.

4.16. Summary of ARR for FY 2022-23

- 4.16.1. The Aggregate Revenue Requirement for FY 2022-23 is summarised in the Table below:

Table 4-34 ARR for FY 2022-23 (Rs. Cr)

Particular	Fixed Cost	Variable Cost	Total
Power Purchase Expenses* (including PGCIL charges)	6,378.17	5,864.00	12,242.17
Transmission Charges	614.92		614.92
Total O&M expenses net of capitalization	1,429.44		1,429.44
Interest and Finance charges	899.64		899.64
Depreciation	907.07		907.07
Bad and Doubtful Debts	260.24		260.24
Add: Return on Equity	684.00		684.00
Gross Expenditure	11,173.49	5,864.00	17,037.49
Less: Non-tariff Incomes	38.06		38.06
Net Annual Revenue Requirement	11,135.42	5,864.00	16,999.42
Revenue from Tariff incl DPS	2,992.78	10,019.30	13,012.08
Revenue from Cross-subsidy (Short-term open access consumers)			-
Total Revenue	2,992.78	10,019.30	13,012.08
Revenue (Gap)/surplus without Subsidy	(8,142.64)	4,155.30	(3,987.34)

*The bifurcation of Power Purchase cost into fixed and variable components is based on the UPPCL level ratio as power purchase considered in licensee petition is based on DBST methodology.

- 4.16.2. From the above table, it can be calculated that the fixed cost component of the ARR is around 65% and the variable cost component is about 35%.

- 4.16.3. The Petitioner requests to approve the ARR claimed for FY 2022-23 in above Table.

Average Cost of Supply

- 4.16.4. The average cost of supply consolidated for all the Discoms have been computed as under: -

Particulars	FY 2022-23
Net Annual Revenue Requirement of Licensee (Rs Cr.)	84,586
Sale of Power (MU)	1,00,237
ACOS	8.43

4.17. Billing determinant and Cross Subsidy as per rationalized Tariff Structure

- 4.17.1. The Billing determinants for FY 2022-23 as per the rationalized structure are given below. The cross subsidy for FY 2022-23 may be considered by Hon'ble Commission on the principles submitted in the APR section based on APR data considering ABR with GoUP subsidy.

Table 4-35 Projection of Billing Determinant as per Rationalized Tariff Categories for all Discoms

Consumer Category/sub-category/Slab Rationalization Proposal		Consumer (No.)	Load (kW)	Energy Sales (MU)
	CONSUMER CATEGORY / SUB-CATEGORY /Slab			
LMV-1	DOMESTIC LIGHT, FAN & POWER:			
(a)	Lifeline Consumers: With contracted load of 1.00 kW, Energy consumption upto 100 kWh/ month (both Rural and Urban)	13,903,317	13,554,167.49	13,928.34
(i)	Consumers getting supply as per 'Rural Schedule' except Lifeline consumers	5,736,441	8,330,255.03	8,642.44
(ii)	Un-Metered:	298,847	519,984.56	898.53
(iii)	Metered: (Dom: Rural Schedule (metered) other than BPL)	5,437,593	7,810,270.47	7,743.91
	Upto 100 kWh / Month	2,773,446	3,105,363.85	4,426.23
	101-300 kWh / Month *	21,87,039	40,27,618	2600
	Above 300 kWh / Month	477,109	771,535.84	718.18
(b)	Supply at single point for bulk loads (50 kW and above, Supplied at any voltage):	469	393,870.42	726.05
	Deemed Franchisee of the Licensee should not charge more than 5% additional charge on the above specified rate.			
(c)	Other Metered Domestic Consumers:	9,493,926	19,047,348.36	24,167.54
(i)	Other Metered Domestic Consumers other than BPL			
	Upto 100 kWh / Month	4,900,233	7,907,369	8,437
	101-300 kWh / Month*	27,44,875	63,03,169	10,256
	Above 300 kWh / Month	1,848,818	4,836,810.40	5,474.72
	Sub Total LMV-1	29,134,153	41,325,641.30	47,464.38
LMV-2	NON-DOMESTIC LIGHT, FAN & POWER:			
(a)	Consumers getting supply as per "Rural Schedule"	231,638	708,000.45	1,528.63
	[Merged with metered category]			
(i)	Metered	231,638	708,000.45	1,528.63
(b)	Private Advertising / Signposts / Sign Boards / Glow Signs / Flex			
	[Merged with (c) below]			
(c)	Other Metered Consumers: (For All Loads)	1,499,140	3,944,924.54	5,500.98
	Upto 4 kW	1,363,804	2,841,424.17	4,255.29
	Upto 100 kWh / Month	621,238	1,317,801	1,441
	101-300 kWh / Month	417,375	847,918.18	1,843.72
	Above 300 kWh / Month	325,191	675,705.46	970.51
	Above 2 kW to 4 kW			
	[Merged with (c) above]			
	Above 4 kW	135,336	1,103,500.37	1,245.69
	Upto 1000 kWh / Month	128,732	657,362.47	702.91
	Above 1000 kWh / month	6,603	446,137.90	542.78
	Sub Total LMV-2	1,730,778	4,652,924.99	7,029.62
LMV-3	PUBLIC LAMPS: Gram Panchayat, Nagar Palika Nagar Panchayat and Nagar Nigam			
	Un-Metered Supply:	682	37,372.88	82.32
	Metered Supply:	3,977	226,903.61	680.69
	Sub Total LMV-3	4,660	264,276.49	763.01
LMV-4	LIGHT, FAN & POWER FOR PUBLIC & PRIVATE INSTITUTION:			
4 (a)	For Public Institutions:	96,517	449,705.51	780.00
4 (b)	For Private Institutions:	14,444	160,626.96	223.82
	All Loads	14,444	160,626.96	223.82

Consumer Category/sub-category/Slab Rationalization Proposal		Consumer (No.)	Load (kW)	Energy Sales (MU)
	For Private Educational Institutions	2,889	32,125.39	44.76
	For Other Private Institutions	11,555	128,501.57	179.06
	Sub Total LMV-4	110,961	610,332.47	1,003.82
LMV-5	SMALL POWER FOR PRIVATE TUBE WELL/ PUMPING SETS FOR IRRIGATION PURPOSES:			
(a)	Consumers getting supply as per "Rural Schedule"	1,261,860	7,716,171.48	13,750.58
<i>(i)</i>	<i>Un-Metered Supply</i>	1,207,522	7,245,678.00	11,954.50
	Rural Schedule	1,207,522	7,245,678.00	11,954.50
	Rural Schedule Pumps	-	-	-
<i>(ii)</i>	<i>Metered Supply</i>	54,338	470,493.48	1,796.08
	Rural Schedule	54,338	470,493.48	1,796.08
	Rural Schedule Pumps	-	-	-
<i>(iii)</i>	<i>Energy Efficient Pumps</i>			
(b)	Consumers getting supply as per "Urban Schedule (Metered Supply)"	50,408	517,106.28	2,157.31
	Sub Total LMV-5	1,312,267	8,233,277.76	15,907.88
LMV-6	SMALL AND MEDIUM POWER:			
(a)	Consumers getting supply as per "Rural Schedule"	47,761	431,524.92	569.90
	Connected Load upto 20 kW	45,179	402,024.12	429.43
	Connected Load Above 20 kW	2,582	29,500.80	140.47
(b)	Consumers getting supply other than "Rural Schedule"	146,123	1,838,923.64	2,690.01
	Connected Load upto 20 kW	129,689	1,838,923.64	1,345.01
	Connected Load Above 20 kW	32,987		938.89
	Sub Total LMV-6	193,884	2,270,448.56	3,259.91
LMV-7 & LMV-8	PUBLIC WATER WORKS, STW, PANCHAYTI RAJ TUBE WELL & PUMPED CANALS:			
(a)	Consumers getting supply other than "Rural Schedule"	14,312	405,439.26	1,322.03
(b)	Consumers getting supply as per "Rural Schedule"	11,580	132,612.96	449.73
	Metered PWW, STW, PANCHAYTI RAJ TUBE WELL & PUMPED CANALS	30,346	341,781.22	2,929.66
	Un-Metered STW, PANCHAYTI RAJ TUBE WELL & PUMPED CANALS	5,724	147,928.50	734.11
	Sub Total LMV-7	61,963	1,027,761.94	5,435.54
	Merged with LMV 7			
	Sub Total LMV-8			
LMV-9	TEMPORARY SUPPLY:			
(a)	Un-Metered	14	52.74	5.71
	Illumination / Public Address / ceremonies for loads upto 20 kW / connection plus Rs.100.00 / kW for each additional kW [for one day only]	-	6.98	0.05
	Temporary shops set-up during festivals / melas or otherwise and having load up to 2 kW	14	45.76	5.66
	PTW consumers of Bundelkhand Area having requirement of electricity only for the Rabi Crop i.e. period between November to February in any year.			
(b)	Metered	21,333	105,937.34	162.29
	(i) Individual Residential Consumers	5,532	31,819.21	33.88
	(ii) Others	15,801	74,118.13	128.41
	Sub Total LMV-9	21,346	105,990.09	168.00
LMV-10	DEPARTMENTAL EMPLOYEES AND PENSIONERS:	85,822	347,010.96	539.04
	Sub Total LMV-10	85,822	347,010.96	539.04
LMV-11	ELECTRIC VEHICLE CHARGING:			
(a)	Multi Storey Buildings (covered under LMV-1b & HV-1b of the Rate Schedule)	-	-	-

Consumer Category/sub-category/Slab Rationalization Proposal		Consumer (No.)	Load (kW)	Energy Sales (MU)
	Multi Story Buildings (Covered under LMV-1b)	-	-	-
	Multi Story Buildings (Covered under HV-1b)	-	-	-
(b)	Public Charging Stations	87	4,971.12	4.59
	Public Charging Station (LT)	74	1,046.75	0.89
	Public Charging Station (HT)	13	3,924.38	3.70
	Sub Total LMV-11	87	4,971.12	4.59
HV-1	NON-INDUSTRIAL BULK LOAD:			
(a)	Commercial Loads / Private Institutions / Non-Domestic Bulk Power consumer with contracted Load 75 kW & above and getting supply at single point on 11 kV & above:	2,548	985,682.50	1,706.17
	For Supply at 11 kV (All Units)	1,347	665,211.84	1,561.12
	For Supply above 11 kV (All Units)	1,201	320,470.66	145.05
(b)	Public Institutions, Registered Societies, Residential Colonies / Townships, Residential Multi-Storied Buildings including Residential Multi-Storied Buildings with contracted load 75 kW & above and getting supply at Single Point on 11 kV & above voltage levels:	3,010	1,356,314.56	1,706.17
	For Supply at 11 kV (All Unit)	1,825	913,723.99	1,561.12
	For Supply above 11 kV (All Unit)	1,185	442,590.57	145.05
	Sub Total HV-1	5,558	2,341,997.05	3,412.35
HV-2	LARGE AND HEAVY POWER:			
(A)	Urban Schedule:	13,375	4,556,880.58	11,564.88
	Supply up to 11 kV	13,017	3,488,493.52	8,694.15
	Supply above 11 kV and up to 66 kV	320	761,319.51	2,296.36
	Supply above 66 kV and up to 132 kV	30	215,791.54	348.38
	Supply above 132 kV	6	91,276.02	226.00
(B)	Rural Schedule	789	269,734.40	617.31
	Supply up to 11 kV	789	269,734.40	617.31
	Sub Total HV-2	14,164	4,826,614.98	12,182.19
HV-3	RAILWAY TRACTION & METRO RAIL:			
(A)	Railway Traction:	3	46,800.00	72.11
(B)	METRO RAIL	7	72,643.63	119.16
	Sub Total HV-3	10	119,443.63	191.27
HV-4	LIFT IRRIGATION WORKS:			
	For Supply at 11 kV	104	96,558.11	321.60
	For Supply above 11 kV upto 66 kV	34	100,042.93	355.39
	For Supply above 66 kV upto 132 kV	-	-	-
	Sub Total HV-4	138	196,601.04	676.99
	Extra State Consumer	2	5,410.00	11.59
	Bulk Supply Consumer	1	1,161,313.00	2,186.43
	Grand Total	32,675,794	67,494,015.40	100,236.60

*	101-150 kWh / Month	14,62,092	21,74,260.03	1,285.01
	151-300 kWh / Month	7,24,947	18,53,358.23	1,314.50
#	101-150 kWh / Month	10,75,218	23,61,721.33	5,426.68
	151-300 kWh / Month	16,69,657	39,41,447.27	4,829.29

Net Revenue Gap with Government Subsidy

4.17.2. As mentioned in clause 4.15.2 of this petition, in the absence of approved subsidy details for FY 2022-23, the provisional amount of subsidy of Rs 2,585.29 for FY 2022-23 may be adjusted provisionally to bridge the revenue-gap. Accordingly, the net revenue gap is Rs. 1,402.05 Crores which may change as per government Subsidy details for FY 2022-23.

4.17.3. It is further submitted that The Hon'ble Commission in its Tariff order for FY 2021-22 has also recognised the Government subsidy component of LMV-5 Metered Rural Consumers as per the GoUP direction, as under:

8.1.12 Further, the Commission is in receipt of a GoUP letter with Ref: 707/24-P-1/2021 dated 25.3.2021 under Section 108 of EA 2003, wherein GoUP mentioned that since majority of the rural LMV-5 consumers are unmetered, and taking into consideration the impact of Covid pandemic, GoUP has decided that tariff rates of rural LMV-5 unmetered consumers may be levied on LMV-5 metered consumers tariff and has directed the Commission to consider the same.

8.1.13 Subsequently, GoUP again sent a letter with Ref: 812/24-1-21-1307/2020 dated 12.5.2021 for billing LMV-5 rural metered as unmetered, however metering of unmetered consumers will also be done and the meter reading will be used for the purpose of energy accounting and subsidy computation. The difference between the revenue at unmetered rates & revenue as per metered energy & rates, would be provided to the Licensees by GoUP.

*8.1.14 Although, this provision is not in conformity of Section 65 of Electricity Act, 2003, in regard to advance subsidy, however, in view of the State Government's commitment to provide additional subsidy in regards to the above arrangement, **the Commission accepts this proposal and the additional subsidy amount, which will be computed at the time of True-up shall be payable by the State Government in conformity to Section 65 of Electricity Act, 2003.***

4.17.4. Accordingly, the revenue from LMV-5 metered consumer sub-category will also involve the component of Government Subsidy.

5. Regulatory Assets

- 5.1.1. The Hon'ble commission had ordered as below in the Tariff order for FY 2021-22 regarding Licensees request related to the Regulatory Assets:

7.1.6 Accordingly, the Licensee`s requested the Commission to approve the above Regulatory Asset on the basis of GoUP letter and provide a roadmap for recovery of the same in line with the provisions of National Tariff Policy, 2016 and UPERC MYT Distribution Regulations, 2019.

7.1.7 They further apprised that as per clause 1.2(i) of the UP UDAY MOU, the State Government has given the commitment for taking over the future losses of Discoms in a graded manner. The total liability of State Government on this account was Rs. 12,049.49 Crore upto FY 2019 against which the Govt. has already provided support of Rs. 5771.02 Crore and for the remaining balance of Rs. 6278.47 crore, the State Govt. has committed that the same will be provided in next 10 years. The subsidy support from Govt. mentioned in point 5 of the letter is towards the cash losses incurred by the Petitioner due to lower collection efficiency and thus is not related to Regulatory Assets and ARR/Tariff approval procedure.

7.1.8 The Commission has gone through the letter dated 5.3.2021 received from GOUP and the submissions of the Licensees. At the outset, it is pertinent to mention that the UDAY agreement (MOU) was a tri-partite agreement between GoUP, Central Govt (GOI) and Discoms, wherein GOI facilitated GoUP to take over 75% of the outstanding debt of the Discoms, and facilitated Banks/FIs not to levy any prepayment charges on the Discom debt and waived off any unpaid o]verdue interest and penal interest on Discom debt. The same was done by the GoUP and Banks/FIs. However, the above letter changes the provisions of the tri-partite UDAY agreement and now the GoUP is unilaterally backing out from its obligations from a retrospective date and changing its share to 'debt' instead of 'taking over the debt'.

7.1.9 Since, the Commission had also approved the UDAY MoU, the Commission is of the view that giving effect to such arrangement in the manner as provided in the letter by the GOUP will have retrospective implication and will affect all the Tariff Orders (which have already been Trued-up) in which the treatment of UDAY has already been done. Also, such treatment of the funds would affect the interest of public at large and will lead to huge 'tariff-shock'. The same was also discussed in the State Advisory Committee (SAC). The Commission has taken note of the strong opposition by the SAC member, stakeholder and public at large against the revision in computation of Regulatory Assets approved by the Commission as proposed by the Discoms.

7.1.10 The Commission cannot decide the matter unilaterally under these ARR proceedings and without taking in consideration the outcome of the legal matter pending before Hon`ble APTEL in this respect.

7.1.11 Therefore, it would not be prudent to accept this change unilaterally on the advice of State Government from the retrospective date, and accordingly, is not accepted.

- 5.1.2. Hon'ble Commission has further mentioned that the commission cannot decide the matter unilaterally under these ARR proceedings and without taking in consideration the outcome of the legal matter pending before the Hon'ble APTEL in this respect.

- 5.1.3. However, it is clear from the above order that consequent to the GoUP letter no. 445/24-1-21-731 (Budget)/2020 dated 05.03.2021, the Licensee is deprived of the amount of Rs. 1,165.59 based on the methodology adopted by the Hon'ble Commission for arriving at the surplus of Rs. 13,337.21 Crores which doesn't exist anymore.

- 5.1.4. Licensee submit that the legal matter pending before the Hon'ble APTEL is against the methodology adopted by the Hon'ble Commission for the determination of surplus of Rs. 13,337.21 while the request of Licensee related to Rs. 12,857.18 is based on the same methodology prescribed by the Hon'ble Commission.
- 5.1.5. It is further submitted that the carrying cost component will continuously increase with the passing years. The Petitioner requests the Hon'ble Commission to kindly consider the above facts and issue suitable orders while finalizing the Tariff Order.
- 5.1.6. Regulatory Asset from FY 2000-01 to FY 2021-22 - (post issue of GOUP Letter) along with the carrying cost is depicted below which shall also be considered while approving the ARR of FY 2022-23: Regulatory Assets from FY 2000-01 to FY 2020-21- (post issue of GOUP Letter)

Table 5-1 Regulatory Assets from FY 2000-01 to FY 2020-21 (post issue of GoUP Letter)

Description	MVVNL
True Up of 2000-01 to 2007-08 and its Regulatory Assets / (Surplus) as on 31.03.16	247.61
True Up of 2008-09 to 2011-12 and its Regulatory Assets / (Surplus) as on 31.03.16	4,375.37
True Up of 2012-13 and its Regulatory Assets / (Surplus) as on 31.03.16	2,425.86
True Up of 2013-14 and its Regulatory Assets / (Surplus) as on 31.03.16	1,769.23
True Up of 2014-15 and its Regulatory Assets / (Surplus) as on 31.03.16	59.48
True Up of 2015-16 and its Regulatory Assets / (Surplus) as on 31.03.16	-217.37
Total Regulatory Assets till Trued-UP FY 2015-16	8,660.18
50% of DISCOM debt taken over as per UDAY	
Net RA / (Surplus) Left after UDAY	8,660.18
Carrying Cost @ 12.50% for FY 2016-17	1082.52
Regulatory Assets/(Surplus) of FY 2016-17 in True Up	-265.48
Total Regulatory Assets Trued-Up till FY 2016-17	9,477.22
25% of Discom Debt Takenover as per UDAY	
Net RA / (Surplus) Left after UDAY	9,477.22
Carrying Cost @ 13.75% for FY 2017-18	1,303.12
Regulatory Assets/(Surplus) in True Up with carrying cost for FY 2017-18	-334.01
carrying cost @ 13.75% for FY 2017-18	-22.96
Total Net RA / (Surplus) till trued up for FY 2017-18	10,423.37
Carrying cost @ 14.05% for FY 2018-19	1,464.48
Net Revenue gap / (surplus) after True up of FY 2018-19	-1567.14
Carrying cost @ 14.05% for FY 2018-19	-110.09
Total Net RA / (Surplus) trued up till FY 2018-19	10,210.62
Carrying cost @ 13.80% for FY 2019-20	1,409.07
Total Net RA / (Surplus) trued up till FY 2019-20	11,619.68
Carrying cost @ 10.65% for FY 2020-21	1,237.50
Total Net RA / (Surplus) trued up till FY 2020-21	12,857.18

6. Necessity of Tariff Category Rationalization

- 6.1.1. The Hon'ble commission has made the following observations regarding the proposal for Tariff Category Rationalization submitted along with ARR petition for FY 2020-21 vide letter No. 427/RAU/ARR 2020-21 dated September 01, 2020 to the Hon'ble Commission in tariff order dated 11.11.2020, as mentioned as below:

"8.1.11. The State owned Discoms vide letter No. 427/RAU/ARR 2020-21 dated September 01, 2020 has submitted a tariff rationalisation for Consumer category / sub-category / slab simplification under uniform tariff for Discoms. However, after consideration of views / comments of various stakeholders, SAC Committee members and the Licensees, the Commission has decided to not approve the tariff category rationalisation as the said proposal was filed at very later stage of Tariff proceedings."

- 6.1.2. The Petitioner, therefore, has resubmitted the consumer category/sub-category/slabs rationalization proposal for consideration of the Hon'ble Commission. The Petitioner submits that the same is required due to following:

- a) Existing Tariff Schedule is very complex to understand by consumers and complicated to implement by the Licensees.
- b) Proper implementation of Government Subsidy is also difficult due to large number of slabs.
- c) The difference in slabs of rural and urban consumers necessitates rationalization.
- d) Category rationalization will help IT system, commercial & finance wings to implement UPERC Tariff orders effectively.
- e) It will be easier to cross subsidize consumer categories as per Tariff Policy.
- f) Tariff rationalization exercise has been carried out under the reforms suggested by Ministry of Power, Govt. of India

- 6.1.3. The state discoms viz DVVNL, MVVNL, PuVVNL, PVVNL and KESCO under Petition No. 1690/2021, 1689/2021, 1687/2021, 1688/2021 and 1691/2021 had requested Hon'ble Commission to determine tariff on the basis of tariff rationalization of consumer category/sub-category/slab submitted in the petition. Hon'ble Commission vide its order dated 29th July 2021 in the abovementioned petitions has mentioned in clause 8.1.8 that the said proposal needs more deliberations from the stakeholders and public at large. The relevant extract is reproduced as follows:

"8.1.8. The State owned Discoms in the Petition submitted a proposal for tariff rationalisation for consumer category / sub-category / slab simplification under uniform tariff for Discoms, thereby reducing the number of categories. However, the Licensees, even after repeated directions of the Commission, did not submit the revised rates & revenue proposed after rationalization. Further, after consideration of suggestions & objections of various stakeholders, public at large and SAC Committee members, who have strongly opposed the above proposal. Taking in consideration the same, the Commission has decided not to approve the proposal Approval of ARR and Tariff for State Discoms for FY 2021-22, APR of FY 2020-21 and True-up of FY 2019-20 Page 518 of 627 for Tariff rationalisation as the said proposal needs more deliberations from the stakeholders and public at large."

- 6.1.4. Licensee had submitted to the Hon'ble Commission vide letter 434/RAU/ARR 2022-23 dated 18 October, 2021 that the licensees had published the above referred tariff categories

rationalization proposal in leading newspapers vide advertisement on 4th September 2020 in compliance to the UPERC Order issued vide letter no. UPERC/Secy/D(Tariff)Hearing/2020-21-922 dated 02.09.2020 during the ARR proceedings for FY 2020-21 for soliciting views of stakeholders and public at large.

- 6.1.5. The petitioner further submits that the tariff rationalization proposal submitted to UPERC has not been prepared to increase tariff and gain additional revenue by the Licensee. Any tariff determined by the Hon'ble Commission as per existing structure of consumer category or on the basis of rationalized consumer categories will be to meet approved revenue gap of ARR / True-Up and thus there will be no additional gain of revenue to the licensee from the change in tariff categories / respective tariff. Licensee have also tried to remove unmetered sub categories as far as possible and introduce a new slab for low income consumers of LMV-2 category consuming up to 100 units considering the difficulties being faced due to Covid-19 pandemic. It should also be noticed that the units of LMV-6 have been changed to meet the future requirements of voltage wise tariff determination which will ultimately benefit the industrial consumers. The rationalization of government consumer's categories has been proposed which will not make any adverse impact on non- domestic / non - commercial consumers.
- 6.1.6. The revenue model as per this rationalization proposal was also submitted to Hon'ble Commission during the ARR proceedings for FY 2021-22 as directed by Hon'ble Commission. Further, the said tariff rationalization was also uploaded on the websites of licensees. However, no specific category/subcategory/slabwise objections/suggestions were provided by the stakeholders/public at large during the course of these petitions. A general comment to not accept the rationalized consumer category/subcategory/slab structure were submitted by the stakeholders and SAC members as mentioned in clause 8.1.8 of Hon'ble Commission's tariff order.
- 6.1.7. The proposal of licensee includes the consumer categories of light & fan and commercial consumers, Govt. Dept./Public Sector undertaking consumers and industrial consumers at large. There was no objection from Govt. Dept./Public Sector undertakings and industries. As regard to light & fan and commercial consumers no specific objections/suggestion were provided by any stakeholders. Hon'ble Commission's specific observations/suggestions on this proposal are also not available in the UPERC tariff order.
- 6.1.8. Licensee had further submitted to the Hon'ble commission vide letter no. 434/ RAU/ARR 2022-23 dated 18.10. 2021 that Licensee have not received suggestions of the Hon'ble Commission in this regard which is essential for submitting billing determinants as per rationalized consumer categories/sub-categories/slab and computation of projected revenue accordingly.
- 6.1.9. Licensees further communicated that they are not in a position to have any deliberation with stakeholders without the guidelines of the Hon'ble Commission. It was also mentioned that considering the above-mentioned facts and paucity of time submission of true-up/APR/ARR petitions, the Licensee will have to submit the Revenue model as per same consumer categories/sub-categories/slab-wise rationalized structure as submitted earlier.
- 6.1.10. It is also pertinent to highlight that MOP has come up with Revamped Distribution Sector Scheme: A Reforms based and Results linked Scheme, (hereinafter referred as RDSS). The draft guideline of the scheme was released on 16.03.21 whereas the final approval for the same was

awarded on 30.06.21. The objective of the scheme is to improve the quality, reliability and affordability of power supply to consumers. It further focuses to reduce AT&C Losses to pan India level of 12-15% by FY 2024-25 and reduce ACS-ARR gap to zero by FY 2024-25.

- 6.1.11. The scheme consists of three parts. The policy and structural reforms that are to be taken under Part 2 for improving DISCOM viability have been specifically mentioned in the guidelines and Tariff Reforms, but not limited to rationalization of consumer categories and annual tariff fixation are also the important part of Part-II guidelines. Further the evaluation matrix gives weightage of 10% to Policy and Structural Reforms.
- 6.1.12. REC (nodal agency for implementing RDSS in Uttar Pradesh) has provided format for deciding roadmap of rationalization of consumer category till FY 2024-25 as a part of goal setting under RDSS. Hence it is of utmost priority for rationalization of consumer categories for improving DISCOM viability. In line with this the aim is to implement the proposed rationalization structure as already submitted to Hon'ble Commission during last two years reducing 80 consumer category/sub category /slab to 53 consumer category/sub category /slab as detailed below.
- 6.1.13. During deliberations in public hearing last year the concern was raised for providing the data of consumers falling in the slab of 101-150 kWh. Therefore, licensee is providing the data of this slab also along with the rationalized structure being proposed, for ease of understanding and decision making of Hon'ble Commission.
- 6.1.14. The Billing determinants for FY 2022-23 as per the rationalized structure are given in 4.16.7 above.
- 6.1.15. Petitioner submits that the following impact on subsidized Categories/ Sub-categories/ Slabs and others will occur due to tariff rationalization:

Impact on subsidized Categories/ Sub-categories/ Slabs and others:

- a) No change has been proposed in the sub-category of Life line consumers
- b) No change has been proposed in the slab up to 100 units for rural consumers
- c) No change has been proposed for the Agriculture Consumers
- d) Unmetered slab for commercial category (LMV 2) has been removed
- e) New slab for commercial consumers up to 100 units consumption has been proposed
- f) New sub-category has been proposed for Private Educational Institute (under LMV 4)
- g) New sub-category has been proposed for Temporary connection for maximum 15 days requirement (LMV 9)

Table 6-1 Status of other states number of categories / sub-categories

State	No. of Categories/ Sub-Categories
UP State Discoms (Existing Tariff Schedule)	80
UP State Discoms (After Rationalization)	53

State	No. of Categories/ Sub-Categories
Bihar	34
Delhi	39
Haryana	41
Rajasthan	45
Punjab	57
Maharashtra	59
Madhya Pradesh	92

Table 6-2 Consolidated Impact on Categories

Tariff category		Type of Consumer	Existing	Proposed	Remarks
LMV-1	Domestic light, fan & power:	Domestic	12	9	Total 4 slabs have been proposed based on unit consumption. Slabs have been made identical for urban and rural categories.
LMV-2	Non-domestic light, fan & power:	Commercial	12	6	As per the recent practice single phase connection is being provided up to 4 kW load. Therefore, connected load up to 2 kW and above 2 kW to 4 kW has been merged into single sub-category having connected load of upto 4 kW. Unmetered slab for Rural consumers has been scrapped.
LMV-4	Light, fan & power for public & private institution:	Commercial	7	3	Consumption wise slab for public and private institutions have been scrapped. However, there will be no impact on billing determinants. For providing relief to Educational Institute, a separate sub-category has been created with lower Energy Charge
LMV-9	Temporary supply:	Commercial	5	3	By eliminating separate slab for metered consumers, they are merged with their respective parent categories with additional increase for temporary connections. Only categories are merged no changed in existing billing determinants of the categories.

Tariff category		Type of Consumer	Existing	Proposed	Remarks
LMV-11	Electric vehicle charging:	Commercial	4	4	No changes proposed
LMV-3	Public lamps:	Institutional (Govt.)	6	2	Power supply to the all unmetered and metered - Gram Panchayat, Nagar Palika & Nagar Panchayat, Nagar Nigam are in common schedule. Therefore, all metered are merged. However, there will be no impact on billing determinants This category doesn't impact Domestic, Commercial, Industrial or Agricultural consumers.
LMV-7	Public water works:	Institutional (Govt.)	2	3	LMV -8. Category was scrapped and has been merged with LMV-7. For rural consumers, a new slab for unmetered consumers has been proposed. This doesn't impact Domestic, Commercial, Industrial or Agricultural consumers Only categories are merged no changed in existing billing determinants of the categories.
LMV-10	Dept emp. & pensioners:	Inst. (Govt.)/Dom	1	1	No changes proposed
HV-3	Railway traction & metro	Institutional (Govt.)	3	2	Single slab proposed for railway traction.
HV-4	Lift irrigation works:	Institutional (Govt.)	3	3	No changes proposed
LMV-5	Small power for private tube well/ pumping sets for irrigation purposes:	Agricultural	4	4	No changes proposed
LMV-6	Small and medium power:	Industrial	6	4	Load based tariff is proposed based on the analysis applicable tariff in various states. Load wise slab has been proposed to replace consumption wise slab. Two slabs- upto 20 kW and above 20kW has been proposed- to

Tariff category		Type of Consumer	Existing	Proposed	Remarks
					enable providing a lower tariff to very small industrial units as compared to medium and large industrial units connected on LT voltage
HV-1	Non-industrial bulk load:	Industrial	8	4	Consumption wise slabs have been replaced with voltage wise slabs. HV-1 Category under the current tariff schedule has two sub-categories, which are further sub-divided based on the Voltage level (Supply at 11 kV and Supply above 11 kV) and further sub-divided into slabs based on consumption. All slabs have been merged considering Revenue neutrality.
HV-2	Large and heavy power:	Industrial	5	5	No changes proposed
	Total		80	53	

6.1.16. The Hon'ble Commission is requested to approve the proposed tariff category rationalization.

7. Proposal for the provision of Green Energy Tariff

- 7.1.1. UPPCL has received the request from few consumers to adopt Green Power Tariff in the State to supply Renewable Energy to the consumers who opts for green energy for meeting their full or partial energy demand.
- 7.1.2. Accordingly, discom request to the Hon'ble Commission under Section 86 (1) (k) of the Electricity Act, 2003 (EA, 2003) read with Regulation 57 (c) and 58 of Uttar Pradesh Electricity Regulatory Commission (Conduct of Business) Regulations, 2019, for the approval for "Green Power Tariff" for supply of Renewable Energy (RE) to consumers for meeting their requirement of utilizing 100% green energy for their entire demand.
- 7.1.3. The petitioner would like to bring to the Hon'ble commission's notice that Maharashtra Electricity Regulatory Commission (MERC) approved Rs. 0.66/kWh as additional tariff to be charged for 100% RE consumer (50% of Rs. 1.33/kWh). Rs. 1.33/kWh was derived as difference of pooled RE power and Variable Charges of conventional Power of all Discoms in the State.
- 7.1.4. The Maharashtra Discoms are to use all the energy from tied-up RE sources to meet the demand of 100% RE of consumers. In case of additional requirement of RE power, Discoms can tie-up for additional energy. Same energy can be used to meet RPO obligation if the consumer requesting for 100% RE is not an obligated consumer.
- 7.1.5. Discom has analysed the methodology adopted by the State of Maharashtra and computed the Green Tariff applicability in the State of Uttar Pradesh as under:

Computation of Green Tariff as per Maharashtra methodology:

- 7.1.6. The difference between RE & Non RE Power as projected for FY 2022-23 is exhibited in the table below.

**REpower Procurement for FY 2022-23			Non-RE power procurement (only variable) FY 2022-23			Diff Bet RE & Non REpower
MU	Rs. Cr	Rs/kWh	MU	Rs. Cr	Rs/kWh	Rs/kWh
29476.75	11030.77	3.74	97,047.05	19114.55	1.97	1.77

** RE Power Procurement consists of Power from all the Hydro source, Solar and Non-Solar & Cogens.

- 7.1.7. Thus, as per MERC methodology explained above Rs. 1.77/kWh is the difference between RE & Non REpower. Therefore 50% of charge determined above i.e. 0.89/kWh as Green Power Tariff to the consumer opting for meeting its 100% of power requirement through RE sources. Such Green Power Tariff would be in addition to regular tariff approved by the Hon'ble Commission.
- 7.1.8. The petitioner proposes a "Green Tariff" (Rs. 0.89/kWh) Over and above the Normal Tariff to the industrial and commercial category consumers with contract demand 1 MVA and above. The proposed tariff may be in line with the approach adopted by the Hon'ble MERC to the interested consumer's subject to be the revision of Green Tariff based on consumers' request in this regard.

- 7.1.9. Initially, a ceiling quantum in MW can be allowed to customers' opting for green power, on first come first served basis, as per the available renewable power and scheduling challenges.

- 7.1.10. The petitioner also requests to the Hon'ble Commission that only 50% of the revenue earned through the Green tariff may be treated as Tariff Income and the remaining 50% of the amount, may be utilized at the discretion of the Distribution Licensee.

8. Tariff Proposal

- 8.1.1. It is hereby submitted that approved road map for reduction of cross-subsidies is required for preparation of Tariff without subsidy. This roadmap is to be approved by Hon'ble Commission as per Tariff Policy.
- 8.1.2. It is to be submitted that as existing rates are not without Government Subsidy and slab wise treatment of GoUP subsidy in T.O. dated 29.07.2021 is not clear, these cannot be considered as a basis to meet the requirements of GoUP direction for Tariff without Govt subsidy w.e.f. FY 2022-23. The road map for DBT in transparent manner approved by GoUP has also been informed in section 4.15.3. The Petitioner does not have the authority to restructure subcategories of the slabs on the basis of rates of other sub-categories of the slabs without the approval of Hon'ble Commission on Rationalized Tariff Categories/ Subcategories/ Slabs.
- 8.1.3. The revenue model also requires Break-up of 'Fixed Charge' and 'Energy Charge'. The component of Total Fixed Costs is about 66% and Variable Cost is about 34% of ARR for FY 2021-22. The recovery as per existing 'Fixed Charge' tariff is about 23% only on existing tariff. UPERC approved methodology for the recovery of remaining component of Fixed Cost through 'Energy Charge' Tariff is not available in the existing UPERC Tariff order. As proposed tariff should also ensure recovery of total approved Fixed costs of ARR, the details of UPERC mechanism are required for revenue model.

9. Compliance to Directives issued by the Hon'ble Commission for FY 2021-22 in Tariff Order dated 29 July 2021

Table-9-1: Compliance to directives issued under Tariff Order for FY 2021-22

Sr.No	Description of Directive(s)	Directives in the Tariff Order for FY 2021-22	Compliance
1.	The State Government is providing annual subsidy of Rs. 11650 Crores for FY 2021- 22. The Petitioners have not developed any transparent mechanism for proper utilization of this subsidy only for the directed class of consumers namely, agricultural, lifeline, rural domestic etc. In view of ensuring transparent utilization of public resources by way of subsidy, the Petitioners are directed to prepare a scheme for transfer of subsidy in a transparent manner with the approval of the State Government to be implemented with effect from 1st April 2022. For introduction of DBT, the Petitioners will need to achieve 100% metering of all consumers and also computerise the details of all those consumers who are to be benefitted with subsidy under DBT including agricultural consumers. The Petitioners shall submit the roadmap for DBT in their next ARR filing for year 2022-23.	As per the time lines specified	This has been complied as described to the Hon'ble Commission vide letter 421/RAU/ ARR/ 2022-23 dated 12 th October, 2021. (Annexure-1)
2.	The Commission also directs the Petitioners to submit the voltage wise (440V, 11kV, 33kV, 66kV, 132 kV) - Energy Sales and Losses. Also, the now mandatory energy audit report and the cost audit report (prepared in accordance with Companies (Cost Records and Audit) Rules 2014) shall also be submitted every year along with the ARR Petitions.	Immediate	The Petitioner submits that the same is submitted in this petition in section 2.2 for FY 2020-21. The Petitioner also submits that the Annual accounts for FY 2020-21 are under finalization process. Once it is finalized, Cost Audit Report for FY 2020-21 will be submitted separately.
3.	The Commission directs the Licensees, not to book excess sales under the unmetered categories.	Next ARR Filings	The Petitioner submits that it has not booked excess sales under the unmetered categories in its current submission.
4.	The Commission directs the Licensees to submit details of the amount of Rs. 116.21 Crs of M/s PTC claimed as 'PTC unverified'	Next ARR Filings	The desired details have been provided by S.E., Electricity Import-Export Unit, UPPCL

Sr.No	Description of Directive(s)	Directives in the Tariff Order for FY 2021-22	Compliance
	power purchase related expenses, along with the bills at the time of Truing up of FY 2020-21, clearly mention the revision if any. Further, if there are no revisions, the same should be deducted (not claimed) in the Power purchase cost of FY 2020-21.		vide letter 3401/EIE dated 23.09.2021. <i>(Copy Annexed)</i>
5.	The Commission directs the Licensees to submit the detailed explanation for the variation in O&M expenses with respect to True-Up in its next filings.	Next ARR Filings	Detailed explanation is provided in True-Up section.
6.	The Licensees must submit the details of each investment scheme / project exceeding Rs. 10 Crore and obtain prior approval of the Commission as per Regulations for inclusion as regulatory expenditure in the ARR. Failure to do so will result in disallowance of such investment in the ARR in order to safeguard the consumers from unjust and unfair charges	Immediate	The Licensee have provided the cost benefit analysis as per the format provided by the Hon'ble Commission for the IT capex schemes. It was submitted to the Hon'ble Commission vide letter 219/RAU/IT dated 28 th June, 2021 that this is the first submission of cost benefit analysis and licensee will prepare other schemes for prior approval on the basis of the mechanism as approved by the Hon'ble Commission for these IT Capex schemes.
7.	The Commission directs the Licensees to submit the detailed Fixed Asset Register (FAR) in excel with all the details of the assets opening, addition, deduction & closing values, as well as depreciation & cumulative depreciations, with the bifurcation of the assets owned by the Licensee, assets created out of Grants and assets created out of consumer contribution.	Immediate	The Petitioner humbly submits that they are obligated to follow the Commission's directive.
8.	The Licensees have not made any submission for LMV-11 i.e. Electric Vehicle Charging consumer category. It is important that proper assessment is made for consumers of this category and submissions are made taking into account the initiatives taken by the Government for promotion of this consumer category.	As per the time lines specified	The Petitioner has submitted the billing determinants for LMV-11 category in this instant petition.
9.	The details of category/sub-category wise billing determinants and revenue of consumers of Franchisee for DVVNL is to be	Immediate	This directive does not pertain to the Petitioner.

Sr.No	Description of Directive(s)	Directives in the Tariff Order for FY 2021-22	Compliance
	properly submitted in similar manner as is done for own consumers i.e. rather than showing billing determinants of Torrent Power as bulk supply, category wise billing determinants are to be submitted from next filing otherwise the Torrent Power could be subsidize rest of the consumers which should not be the case.		
10.	There is lack of clarity on the interest of security deposited that has been given to the consumers. This concern has been raised by several consumers in the public hearing. Licensee in its submission should clearly demonstrate how much interest on security deposit was required to be given and how much interest has been actually disbursed.	Immediate	The Petitioner submits that they are obligated to follow the Commission's directive. Action is being taken as per the order of the Hon'ble Commission on petition 780/2012 dated 25 th October, 2021.
11.	The Petitioners are directed to ensure 100% feeder metering and DT metering within next one year.	Immediate	MNVNL submits that the process of DT metering is already initiated in the bigger cities and has metered 1,16,685 DTs till Dec'21. Further, it has envisaged to achieve 100% DT metering within next one year.
12.	The Licensees are directed to submit year wise data regarding Surcharge Waiver in various One-Time Settlement (OTS) schemes from the year the same was abolished, to FY 2020-21, in the next filing.	Immediate	<i>Data is being compiled. It will be submitted shortly.</i>
13.	All procurements made by the Petitioners should be through Competitive Bidding only.	Immediate	It is submitted that all Power Purchase are being carried out by UPPCL through Competitive Bidding process only. During FY 2021-22, following PPAs have been executed at a Tariff determined through competitive bidding: 1. Solar Power, 75 MW 2. Hydro Power, 400 MW Further, bidding for following projects is being initiated

Sr.No	Description of Directive(s)	Directives in the Tariff Order for FY 2021-22	Compliance
			under Competitive Bidding process; 1. Wind Power, 500 MW 2. Hydro Power, 500 MW.
14.	The Licensee are directed to strictly follow the Central Government Guidelines for Procurement of power for short term (i.e. for a period more than one day to one year) through tariff-based bidding process using National e-bidding portal. However, no approval will be required for purchasing power (i) through exchange or (ii) to fulfil contingent short term power requirements. For all other power purchases, prior approval of the Commission is necessary.	Immediate	The Petitioner submits that they are obligated to follow the Commission's directive.
15.	The Licensees are directed to ensure that they fulfil all the Renewable Purchase Obligations (solar, non-solar, HPO) and may procure power from GTAM markets or as per Central Government Guidelines, and get prior approval of the Commission wherever required.	As per the time lines specified	UPPCL executed new PPAs of cumulative capacity 475 MW for FY 2021-22 and bidding for 1000 MW projects is being initiated under Competitive Bidding process. Further, UPPCL is also exploring opportunity to fulfil RPOs through Green Day Ahead Market (GDAM).
16.	The Commission directs the Licensees to submit the MOD stack in accordance with MOD Regulation 2021.	Immediate	The Petitioner humbly submits that that power procurement is being done by UPPCL.
17.	The Commission directs the Licensees to ensure to file its ARR/ Tariff Petition on time strictly in accordance with the applicable UPERC MYT Regulations.	Immediate	The Petitioner submits that they are obligated to follow the Commission's directive.
18.	The Commission directs that metering of LMV-10 consumers should be completed by end of FY 2021-22. The Petitioners shall also strive to ensure metering of consumers in LMV-5 category as well because 100% metering of consumers is necessary for implementing DBT mechanism.	As per the time lines specified	Following has been mentioned in Tariff Order of FY 2014-15: <i>"Section 23 (7) of Electricity Reforms Act, 1999 provides that "terms and condition of service of the personnel shall not be less favourable to the terms and condition which were applicable to them before the transfer". The same spirit has been echoed under first proviso of section 133 (2) of the</i>

Sr.No	Description of Directive(s)	Directives in the Tariff Order for FY 2021-22	Compliance
			<p><i>Electricity Act, 2003. The benefits for employees / pensioners as provided in section 12 (b) (ii) of the Uttar Pradesh Reform Transfer Scheme, 2000 include "concessional rate of electricity", which means concession in rate of electricity to the extent it is not inferior to what was existing before 14th January, 2000. The rates and charges indicated above for this category are strictly in adherence of above statutory provisions."</i></p> <p>Efforts are being made to comply the Hon'ble Commission directions. However, problem is being faced in maintaining industrial relations with employee unions due to discontinuation of Tariff of LMV-10 after FY 2014-15.</p>
19.	The Commission directs that the direction of earlier Tariff Orders which have not been complied yet may be complied with immediately.	Immediate	The Petitioner submit that they are obligated to follow the Commission's directive. The status of uncomplined Directives of previous year is given in subsequent tables.
20.	The Petitioner shall upload on its website the Petition filed before the Commission along with all regulatory filings, information, particulars and related documents, which shall be signed digitally and in searchable pdf formats along with all Excel files and as per any other provision of the Regulations and Orders of the Commission. The Petitioner shall also ensure that these files are broken into such size which can be easily downloaded.	Immediate	The Petitioner submit that they are obligated to follow the Commission's directive.
21.	The Commission has noted that the Licensees have successfully completed a pilot implementation of peer to peer (P2P) trading of electricity in rooftop solar energy using	As per the time lines specified	Implementation of Block-chain technology in phased manner is under process, however modalities regarding billing,

Sr.No	Description of Directive(s)	Directives in the Tariff Order for FY 2021-22	Compliance
	Blockchain technology. The Commission directs the Licensees to take the pilot forward to its next phase for integrating it with the existing billing system (ERP)/ financial settlement etc. so that P2P rooftop solar energy may become operational for the prosumers and consumers of the State.		settlement, transaction cost, net metering and open access etc. are being checked for the next stage implementation. Further, UPPCL will file Petition before Hon'ble Commission for seeking clarifications in regard to various techno-commercial parameters for P2P mechanism.
22.	The Commission has approved the Smart Meter rollout plan for State Discoms of Uttar Pradesh vide Order dated 15.11.2018. Licensees had sought the date for extension of the timeline, the same has expired. The Licensee is directed to submit the status of completion of the rollout and also submit the technical/financial impact of such rollout on their system.	As per the time lines specified	<i>Quarterly status report is submitted to Hon'ble Commission. Further, It is to be informed that as per the Gazette notification No. 230, Dated 19.08.2021 of Ministry Of Power, Government Of India, all new smart meters are to be installed in Pre-paid mode and as per the directions of Ministry Of Power, Government Of India all smart meters have to use 4G communication technology. These are complex and require major changes in AMI System. To incorporate above changes factors like procurement of 4G smart meters, software developments etc. are being addressed.</i>
23.	The Commission encourages the Licensee implement more of such projects including battery storage. The Licensees are directed to seek innovative solutions based on energy storage systems, other innovative technologies to reduce the system losses, provide better services to the consumers etc.	As per the time lines specified	Discussion initiated with SECI for the feasibility of customized energy storage requirement of UPPCL.

Compliance status of un-complied directions of earlier Tariff Orders are asunder:

Table 9-2 Compliance to uncomplid directives issued under Tariff Order for FY 2020-21

Sr. No.	Description of Directives	Compliance status
1.	Category / Sub-Category wise billed revenue as per Rate Schedule is included in the Audited Annual Accounts/Financial Statements from FY 2020-21 onwards.	Upgradation of IT Billing System is under process which will enable to capture the data as per Hon'ble Commission requirement.

Sr. No.	Description of Directives	Compliance status
2.	Agricultural consumers should be given un-interrupted supply preferably during day time as per schedule.	The Petitioner submits that it is obligated to follow the directive.

Table 9-3 Compliance to uncomplained directives issued under Tariff Order for FY 2019-20

Sl. No	Description of Directives	Compliance status
1	Licensees to comply with the Regulation 23 A (b) of UPERC Multi Year Distribution Tariff Regulations, 2014 relating to obtaining project wise prior approval of the Commission before incurring capital expenditure of an amount exceeding 10 Crore, so that such investments may be allowed in the ARR.	The Petitioner submits that it is obligated to follow the directive of Hon'ble Commission. However, the Petitioner humbly submits that the UPERC MYT Regulation 2014 is not applicable anymore.
2	Agricultural consumers should be given un- interrupted supply preferably during day time as per schedule.	The Petitioner submits that it is making all efforts to provide un-interrupted supply preferably during day time as per schedule to the Agricultural consumers.
3	100% metering for LMV-10 consumers was Ordered in Commission's MYT Order dated November 30, 2017. This should be immediately complied with failing which punitive measures may be taken against the Licensee in terms of deemed revenue.	This Directive is covered under FY 2021-22 above.

Table 9-4 Compliance to uncomplained directives issued under Tariff Order for FY 2018-19

Sl.No.	Description of Directive	Compliance status
1	The Commission had directed the Licensees to submit the actual details of revenue category and sub-category wise for all the consumers.	This Directive is covered under FY 2021-22 above.
2	The Commission directed the Licensees to submit a trajectory of targets for improving Collection Efficiency during the Control Period (FY 2017-19) at the time of Annual Performance Review. However, the Licensees have not submitted any trajectory targets for improving the Collection Efficiency.	Discoms are making efforts to improve their Collection Efficiency. It is humbly submitted that the Hon'ble Commission is determining the ARR at 100% Collection Efficiency.

Sl.No.	Description of Directive	Compliance status
3	The Licensees are directed to depict the Regulatory Surcharge separately and distinctly in the electricity bills of the consumers. The Licensees should maintain separate accounting fields for the regulatory surcharge and capture the amounts billed and collected as Regulatory Surcharge in both of its financial and commercial statements. This would enable the Licensees to correctly report the amounts collected towards Regulatory Surcharge.	It is humbly submitted that UPERC has abolished the Regulatory Surcharge.
4	Submit details of inter- state losses as per the format described in the relevant part of this order	Inter-state losses have been submitted to Hon'ble Commission in the Format provided by Hon'ble Commission in the relevant section.

Table 9-5 Compliance to uncomplained directives issued under Tariff Order for FY 2017-18

S.No.	Description of Directive	Compliance
1	The Commission directs the Licensee to evolve principles for prudent segregation of ARR towards wheeling function and retail supply function embedded in the distribution function in accordance with part VI of the Multi Year Distribution Tariff Regulations, 2014.	The Petitioner humbly submits that complete segregation of account between wheeling and retail supply has still not taken place, therefore the Petitioner has adopted the basis of allocation of the expenses in line with the methodology used by the Hon'ble Commission in its last Tariff Order.
2	The Commission directs the Licensee to expedite the process of conducting Cost of Service (CoS) studies which would serve as a tool for alignment of costs and charges and submit details regarding the CoS studies for each category or voltage level.	Tariff Policy, 2016 requires determination of Cross-subsidy levels based on Average Cost of Supply only. Therefore, the cost of service study is no longer required.
3	The Commission directs the Licensee to install electronic meters in the residential consumers under LMV-10 category and submit a progress report every month.	Efforts are being made in this direction. Problem is being faced in maintaining industrial relations with employee unions and unrest with employees considering their agreement with the Govt.

S.No.	Description of Directive	Compliance
4	The Commission directs the Licensee to ensure the timely payment of the interest on security deposit to the consumers as per the Orders of the Commission and submit the compliance report. Licensees should submit the details of the actual interest on consumer security deposit paid to the consumers in FY 2016-17. MVNNL and KESCO were directed to submit the details of the actual interest on consumer security deposit paid to the consumers for FY 2014-15 & FY 2015-16.	The data work is not fully computerized for FY 2014-15 & FY 2015-16. It has advertised by the utility that the consumers whose interest has not been adjusted in the bills, should inform the concerned divisions.
5	The Commission directs the Licensee to file a separate Petition for approval of prior period expenses / incomes. The Petition should clearly indicate the head-wise year-wise bifurcation of prior period expenses / incomes clearly indicating the impact of such expenses / incomes on various ARR components, and such impact should not exceed the normative expenses for any particular year.	The Licensee hereby submits that prior period expenses/income records as required for preparing the details is not readily available. This is causing the concerns for the petition submission

10. Retail and Wheeling Business ARR Summary

- 10.1.1. Clause 39.1 of the MYT (Transmission and Distribution) Regulations, 2019 provide that ARR/Tariff filing by the Distribution Licensee shall separately records for the Distribution Wires Business and Retail Supply Business and shall prepare an Allocation Statement to enable the Hon'ble Commission to determine the Tariff separately for the Distribution Wires Business and Retail Supply Business. In case complete accounting segregation has not been done between the Distribution Wires Business and Retail Supply Business of the Distribution Licensee, the ARR of the Distribution Licensee shall be apportioned between the Distribution Wires Business and Retail Supply Business in accordance with an Allocation Matrix to be prepared by the Licensee and submitted for the Hon'ble Commission's approval.
- 10.1.2. The Petitioner humbly submits that complete segregation of account between wheeling and retail supply has still not taken place, therefore the Petitioner has adopted the basis of allocation of the expenses in line with the methodology used by the Hon'ble Commission in its last Tariff Order.
- 10.1.3. Allocations of Consolidated ARR into wheeling & retail supply for 2nd Control Period have been estimated into following table:

Table 10-1: Wheeling and Retail Supply for the FY 2022-23 (Rs Crore)

Particulars	Allocation %		Allocation (FY 2022-23)		
	Wheeling	Supply	Wheeling	Supply	Total
Power Purchase Expenses (incl PGCIL charges)	0%	100%	0.00	64,294.25	64,294.25
Apportionment of O&M Expenses & Interest & Finance Charges of UPPCL	0%	100%	0.00	0.00	0.00
Transmission Charges - Intra state (incl SLDC Charges)	0%	100%	0.00	2,925.37	2,925.37
Gross O&M Expenses					
Gross Employee cost	60%	40%	2,524.59	1,683.06	4,207.66
Gross A&G expenses	40%	60%	345.66	518.50	864.16
Gross R&M expenses	90%	10%	2,446.75	271.86	2,718.61
Smart Metering OPEX	0%	100%	0.00	500.05	500.05
Gross Interest & Finance charges	90%	10%	3,321.94	369.10	3,691.04
Depreciation	90%	10%	3,264.18	362.69	3,626.87
Gross Expenditure			11,903.13	70,924.89	82,828.01
Expense capitalization					
Employee cost capitalized	60%	40%	977.96	651.97	1,629.93
Interest capitalized	90%	10%	603.03	67.00	670.04
A&G expenses capitalized	40%	60%	0.00	0.00	0.00
Net Expenditure			10,322.13	70,205.91	80,528.04
Provision for Bad & Doubtful debts	0%	100%	0.00	1,264.82	1,264.82

Particulars	Allocation %		Allocation (FY 2022-23)		
	Wheeling	Supply	Wheeling	Supply	Total
Provision for Contingency Reserve	0%	100%	0.00	0.00	0.00
Total net expenditure with provisions			10,322.13	71,470.73	81,792.86
Add: Return on Equity	90%	10%	2,625.04	291.67	2,916.71
Less: Non-Tariff Income	0%	100%	0.00	183.80	183.80
Aggregate Revenue Requirement (ARR)			12,947.17	71,578.59	84,525.76

11. Wheeling Charges from Open Access Consumers

- 11.1.1. Clause 39.1 of the MYT (Transmission and Distribution) Regulations, 2019 provide that ARR/Tariff filing by the Distribution Licensee shall separately records for the Distribution Wires Business and Retail Supply Business and shall prepare an Allocation Statement to enable the Hon'ble Commission to determine the Tariff separately for the Distribution Wires Business and Retail Supply Business.
- 11.1.2. The wheeling charge has been computed on overall consolidated Discom basis keeping in line with the consistent philosophy of the Hon'ble Commission in past Tariff Orders and Clause 51 of the MYT (Transmission and Distribution) Regulations, 2019.

Table 11-1: Wheeling Charges for FY 2022-23

Wheeling Charges For FY 2022-23			
S. No	Particulars	Units	FY 2022-23
1	Wheeling ARR	Rs. Crores	12908.65
2	Retail sales (PVVNL, DVVNL, MVVNL, PuVVNL, KESCO)	MU	100236.60
3	Average Wheeling charge	Rs./kWh	1.29

Table 11-2: Voltage-wise Wheeling Charges for FY 2022-23

Voltage-Wise Wheeling Charges For FY 2022-23				
S. No.	Particulars	Units	% of Avg. wheeling charge	FY 2022-23
1	Connected at 11 kV			
i	Long Term	Rs./kWh	80%	1.030
ii	Medium Term	Rs./kWh	80%	1.030
iii	Short Term	Rs./kWh	80%	1.030
2	Connected above 11 kV			
i	Long Term	Rs./kWh	50%	0.644
ii	Medium Term	Rs./kWh	50%	0.644
iii	Short Term	Rs./kWh	50%	0.644

12. Cross Subsidy Surcharge

12.1.1. The cross-subsidy surcharge for Open Access consumers has been computed in accordance with the methodology specified in Clause 49 of the UPERC MYT (Transmission and Distribution) Regulations, 2019.

12.1.2. As per Clause 49.2 of the UPERC MYT (Transmission and Distribution) Regulations, 2019, the cross-subsidy surcharge is to be computed based on the difference between (i) the tariff applicable to the relevant category of consumers and (ii) the cost of the Distribution Licensees to supply electricity to the consumers of the applicable class. In case of a consumer opting for open access, the Distribution Licensees could be in a position to discontinue purchase of power at the margin in the merit order. Accordingly, the cost of supply to the consumer for this purpose is computed as the aggregate of (a) per unit weighted average cost of power purchase including meeting the Renewable Purchase Obligation; (b) transmission and distribution losses applicable to the relevant voltage level and commercial losses allowed by the Hon'ble Commission; (c) transmission, distribution and wheeling charges up to the relevant voltage level; and (d) per unit cost of carrying regulatory assets, if applicable.

12.1.3. The Petitioner has computed the cross-subsidy surcharge for the relevant consumer categories as per the formula prescribed in Clause 49.2 of UPERC MYT (Transmission and Distribution) Regulations, 2019, which is reproduced as follows:

$$S = T - [C / (1 - L/100) + D + R]$$

Where:

S is the Cross-Subsidy Surcharge;

T is the tariff payable by the relevant category of consumers, including reflecting the Renewable Purchase Obligation;

C is the per unit weighted average cost of power purchase by the Licensee, including meeting the Renewable Purchase Obligation;

D is the aggregate of transmission, distribution and wheeling charge applicable to the relevant voltage level;

L is the aggregate of transmission, distribution and commercial losses, expressed as a percentage applicable to the relevant voltage level;

R is the per unit cost of carrying regulatory assets:

Provided that the Cross-Subsidy Surcharge shall not exceed 20% of the Tariff applicable to the category of the consumers seeking Open Access."

12.1.4. The category-wise Cross Subsidy Surcharge computed by the Petitioner for FY 2022-23 as per above formula is as given in the Table below:

Table 12-1: Cross Subsidy Surcharge for FY 2022-23

Cross Subsidy Surcharge For FY 2022-23																
S. No.	Categories	Revenue (Rs. Crore)	Sales (MU)	Average Billing Rate (T)* (Rs./kWh)	Wt. Avg. Pur. Cost (C)** (Rs./kWh)	Aggregate of Trasn., Dist. & Wh. Charges applicable to the relevant voltage level (Rs./kWh)					System Loss (% to the relevant voltage level)			Carrying Cost of Regulatory Assets (Rs./kWh) (R)	S=T-[C/(1-L/100)+D+R]	S*** (Rs./kWh)
						Transmission Charge		Distribution Charge	Wheeling Charge	Aggregate of Trasn., Dist. & Wh. Charges applicable to the relevant voltage level (D)	PGCIL	UPPTCL	Dist. Loss			
						Inter-State Trns. Charges	Intra-State Trns. Charges									
1	HV-1 (Supply at 11 kV)	3204.59	3122.25	10.26	4.59	0.412	0.024	0.432	1.030	1.90	1.27%	3.27%	17.32%	0.00	2.55	2.05
2	HV-1 (Supply above 11 kV)	440.72	290.10	15.19	4.59	0.412	0.024	0.432	0.644	1.51	1.27%	3.27%	0.46%	0.00	8.85	3.04
3	HV-2 (Supply upto 11 kV)	7581.93	7726.46	9.81	4.59	0.412	0.024	0.432	1.030	1.90	1.27%	3.27%	17.32%	0.00	2.10	1.96
4	HV-2 (Supply above 11 kV & upto 66 kV)	1762.01	2296.36	7.67	4.59	0.412	0.024	0.432	0.644	1.51	1.27%	3.27%	0.46%	0.00	1.33	1.33
5	HV-2 (Supply above 66 kV & above 132 kV)	275.76	348.38	7.92	4.59	0.412	0.024	0.432	0.644	1.51	1.27%	3.27%	0.28%	0.00	1.58	1.58
6	HV-2 (above 132 kV)	159.52	226.00	7.06	4.59	0.412	0.024	0.432	0.644	1.51	1.27%	3.27%	0.28%	0.00	0.73	0.73
7	HV-3 (Supply at & above 132 kV)	78.14	72.11	10.84	4.59	0.412	0.024	0.432	0.644	1.51	1.27%	3.27%	0.28%	0.00	4.50	2.17
8	HV-3 (For Metro Traction)	106.60	119.16	8.95	4.59	0.412	0.024	0.432	0.644	1.51	1.27%	3.27%	0.28%	0.00	2.61	1.79
9	HV-4 (Supply at 11 kV)	303.77	321.60	9.45	4.59	0.412	0.024	0.432	1.030	1.90	1.27%	3.27%	17.32%	0.00	1.73	1.73
10	HV-4 (Supply above 11 kV upto 66kV)	329.14	355.39	9.26	4.59	0.412	0.024	0.432	0.644	1.51	1.27%	3.27%	0.46%	0.00	2.92	1.85
*Including reflecting the Renewable Purchase Obligation.																
**Including meeting the Renewable Purchase Obligation.																
***CSS shall not exceed 20% of the Tariff Applicable to the category of the consumer seeking Open Access.																

13. Appeal before Hon'ble APTEL on previous Tariff Orders

- 13.1.1. It is submitted that some of the claim in the Petition for FY 2018-19, was disallowed by the Hon'ble Commission in Order dated 03.09.2019. UPPCL has filed an Appeal bearing Appeal No. 389 of 2019 before the Hon'ble Appellate Tribunal for Electricity challenging the disallowance by the Hon'ble Commission. The said Appeal has been admitted by the Hon'ble Tribunal and is pending adjudication and will have a bearing in this Petition. In view thereof, it is submitted that UPPCL's claim in the present Petition is without prejudice to UPPCL's contentions in Appeal No. 389 of 2019.
- 13.1.2. It is submitted that some of the claim in the Tariff Petition for FY 2020-21, was disallowed by the Hon'ble Commission in Tariff Order dated 11.11.2020. MVVNL has filed an Appeal bearing Appeal No. 174 of 2021 before the Hon'ble Appellate Tribunal for Electricity challenging the disallowance by the Hon'ble Commission. The said Appeal has been admitted by the Hon'ble Tribunal and is pending adjudication and will have a bearing in this Petition. In view thereof, it is submitted that UPPCL's claim in the present Petition is without prejudice to UPPCL's contentions in Appeal No. 174 of 2021.
- 13.1.3. It is submitted that some of the claim in the Petition for FY 2021-22, was disallowed by the Hon'ble Commission in Tariff Order dated 29.07.2021. This has been challenged before Hon'ble Appellate Tribunal for Electricity challenging the disallowance by the Hon'ble Commission.

14. Additional information sought by the Commission with reference of letter no. UPERC /Secy/D(T)/2021-826 dated 06/10/2021.

1. Status of pending cases filed against UPERC in various forums
 - The required data is provided in Additional MYT Format.
2. Details of land capitalized during the year, along with the purpose of usage and status of usage of land, along with the lease deed for each land capitalized. Also, provide the list of un-utilized land capitalized
 - No Land has been capitalized during FY 2021-22.
3. List of Open Access consumers (Long Term, Short Term, Medium Term) along with their consumption.
 - The required data is provided in Additional MYT Format.
4. Wherever the opening values in the new audited account doesn't match with the closing shown in the previous audited account, the reasons for the same to be provided as part of balance sheet
 - As per the audited balance sheet of FY 2020-21, if the opening value is not matching with the last year closing value, there are some prior period adjustments, same are shown in the balance sheet under the head PPE.
5. Provide the detailed breakup of CWIP claimed for the year along with the Petition.
 - The required data is provided in Additional MYT Format.
6. Provide the portion of electricity duty in the Bad Debts along with the Petition and reconcile the same with the balance sheet for the year.
 - As per audited balance sheet for FY 2020-21, bad debts are zero.
7. Submit the month-wise actual category/ sub-category wise Billing Determinants (No. of Consumers, Connected Load & Sales) & actual Revenue for the year along with the Petition.
 - The required data is provided in Additional MYT Format.
8. Submit the reconciliation of the actual O&M expenses (i.e. employee expenses, A&G expenses, R&M expenses) vis-à-vis the normative expenses for the year.
 - The Petitioner submits that the reconciliation of actual O&M expenses vis-à-vis the normative expenses for FY 2020-21 as shown below:

Particulars	Audited Balance Sheet (Rs. Cr)	Normative as per UPERC MYT Regulations, 2019 (Rs. Cr.)
Gross Employee Expenses	689.36	1062.76
A&G Expenses	573.24	315.21
R&M Expenses	382.56	378.23

9. The Petitioner is directed to ensure that actual Power Purchased (MUs) & ex-bus & at energy delivered at Discom periphery (MU) along with inter & intra state losses are made part of the Audited Balance Sheet
- Audited Balance sheet is prepared as per the provisions of Company's Act.
10. Ensure that the actual category/ sub-category wise Billing Determinants (No. of Consumers, Connected Load & Sales) & actual Revenue are made part of the Audited Balance Sheet.
- Audited Balance sheet is prepared as per the provisions of Company's Act. Further, Category-wise Revenue is already a part of the balance sheet. Making sub-category wise billing determinants part of balance sheet is under discussion with finance department.
11. The Petitioner is directed to ensure that the actual Power Purchase Cost with detailed break-up of each source, inter-state transmission charges, intra-state transmission charges are made part of the Audited Balance Sheet.
- Audited Balance sheet is prepared as per the provisions of Company's Act. Further, the Petitioner submits that UPPCL is the sole power supplier for all state Discoms. The petitioner receives the energy bill from UPPCL only.
12. Submit the PPA's, Commission's approval and bills of each source from which power is procured, along with the True-up/ARR petition.
- Sample bills were provided to Hon'ble Commission last year with the submission that other bills may also be provided as per further direction of the Hon'ble Commission.
13. Submit the details of each investment scheme/project exceeding Rs. 10 Crs. And obtain prior approval of the Commission as per Regulations for inclusion as regulatory expenditure in the ARR. Further, Petitioner should submit the Petitions on quarterly basis for approval of the Commission in line with the MYT Regulations 2019. Failure to do so will result in disallowance of such investment in the ARR in order to safeguard the consumers from unjust and unfair charges.
- The Licensee have provided the cost benefit analysis as per the format provided by the Hon'ble Commission for the IT capex schemes. It was submitted to the Hon'ble Commission vide letter 219/RAU/IT dated 28th June, 2021 that this is the first submission of cost benefit analysis and licensee will prepare other schemes for prior approval on the basis of the mechanism as approved by the Hon'ble Commission for these IT Capex schemes. The Petitioner submits that the DPRs are being prepared and will be submitted after approval from concerned department of schemes as per MYT Regulations, 2019.

14. Provide the daily load curves and monthly load curves for last year along with the corresponding N2 region demand curves of exchange.

- The Petitioner submits it does not maintain the daily load curves and monthly load curves as per current Discom practices.

15. Prayers

The Petitioner humbly prays that the Hon'ble Commission may be pleased to:

- a) Admit the Petition accompanying True-Up for FY 2020-21, APR of 2021-22 and ARR for 2022-23.
- b) To condone the delay in filing the tariff petition as the Petitioner had sought additional time from Hon'ble Commission in providing the data under Additional MYT Format as required by Hon'ble Commission .
- c) Allow the Petitioner to procure power through bilateral contracts/exchanges/short term contracts to maintain the desired schedule of supply in the Licensee area in case the power procurement from long term sources falls short of levels envisaged and accordingly allow the Petitioner to claim Incremental Power Purchase Cost on such purchases on quarterly basis and allow the variations in final truing up if any balance adjustment remains;
- d) Approve Green Tariff and allow petitioner to implement the same.
- e) Allow the Smart Meter OPEX expenses over and above the O&M expenses claim;
- f) Allow the expenses incurred by petitioner on account of Licensee fees paid to Hon'ble Commission, over and above the O&M expenses claim;
- g) To allow tariff as per Rationalized categories / Sub-categories / slab structure;
- h) To approve the Revenue Gap along with the carrying cost as claimed in True-Up and ARR section of this instant Petition.
- i) Allow the Petitioner to add/change / alter / modify this application at a future date;
- j) To condone any inadvertent omissions/ errors/ shortcomings and permit the Petitioners to add/ change/ modify/ alter this filing and make further submissions as may be required at a future date;
- k) To pass such Orders as deemed fit and proper in the facts and circumstances of the case in the interest of justice.