



Analysis of ARR and Tariff Proposal of TPCODL for FY 2024-25 Public Hearing

03 FEBRUARY 2024

BY

WORLD INSTITUTE OF SUSTAINABLE ENERGY

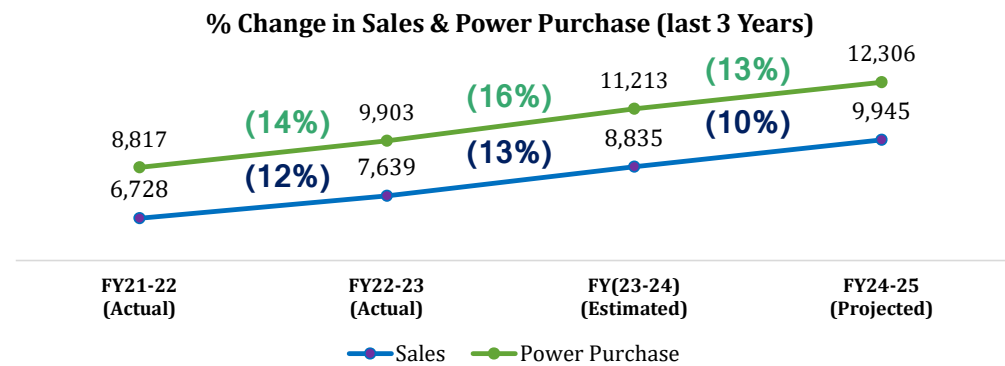
(CONSUMER COUNSEL)

PUNE

Demand Forecasting

Category	Sales (MU)							Consumers (Nos.)			
	FY 2022-23	FY 2023-24			FY 2024-25			As on 1st April 2022	As on 1st April 2023	As on 1st April 2024	% growth over FY2022
	Actual	Proposed	Approved	Estimated	Projected	Projected % over approved of FY23-24	Projected % over estimates of FY23-24				
LT	4,269	4,796	5,064	4,897	5,592	10%	14%	29,15,853	30,63,647	31,98,025	4.39%
HT	1,813	1,468	1,947	2,076	2,288	18%	10%	11,575	11,747	12,010	2.24%
EHT	1,556	1,096	1,858	1,862	2,065	11%	11%	34	37	39	5.41%
Total	7,639	7,360	8,868	8,835	9,945	12%	13%	29,27,462	30,75,431	32,10,074	4.38%
<i>LT sale % of Total</i>	<i>55.88%</i>	<i>65.16%</i>	<i>57.10%</i>	<i>55.43%</i>	<i>56.23%</i>						
Power Purchase (MU)	9,903	10,999	11,256	11,213	12,306	9%	10%				

- In HT, Consumer Nos. are increasing from 11,747 (FY23-24) to 12,010 (FY24-25) i.e. addition of 263 HT consumers but sales projection is 10% higher in FY24-25 i.e., by 212 MU compared to revised estimates of FY23-24.
- LT sales projected to increase from 4,897 MU (FY23-24) to 5,592 MU (FY24-25). i.e. 14% increase. However, LT consumer growth in FY24-25 is just 4.39% only.
- Higher LT-Sales projections leads higher need of cross subsidy and thereby impacts tariff adversely.**

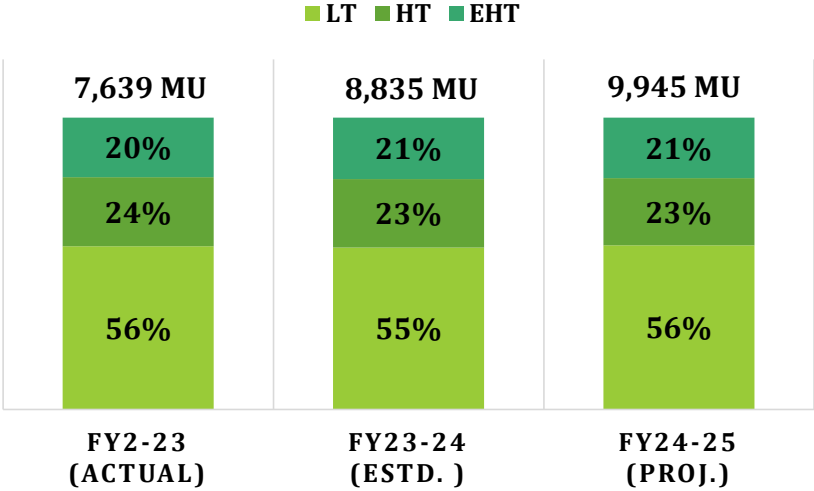




Electricity Consumption Pattern Across Different Categories

Particulars	FY2-23 (Actual)	FY23-24 (Estd.)	FY24-25 (Proj.)
LT consumers	29,15,853	30,63,647	31,98,025
LT consumption (MU)	4,269	4,897	5,592
Per consumer use per month kWh	122	133	146
HT consumers	11,575	11,747	12,010
HT consumption (MU)	1,813	2,076	2,288
Per consumer use per month kWh	13,053	14,727	15,876
EHT consumers	34	37	39
EHT consumption (MU)	1,556	1,862	2,065
Per consumer use per month kWh	38,13,725	41,93,694	44,12,393
Total consumption	7,639	8,835	9,945

CONSUMPTION SHARE

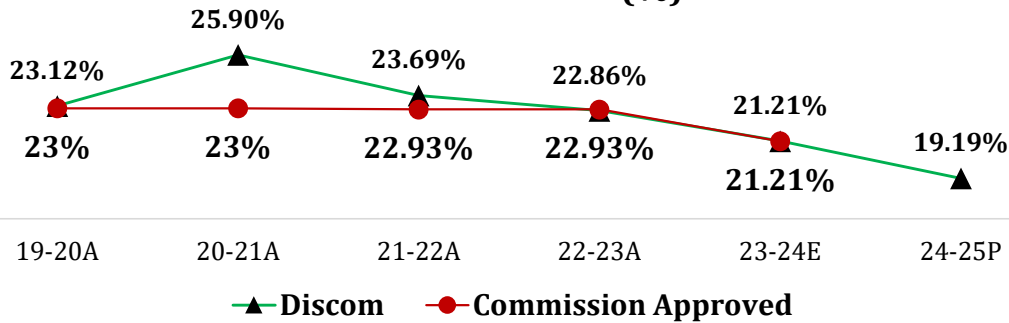


- Share of EHT and HT sales has been estimated on higher side compared to FY22-23. However, with proposed addition of TWO new consumers the **EHT Sales projections** should be done based on **Total Demand**.
- Considerably high sales projections (i.e., >95% w.r.t FY22-23 estimates) in consumer categories like Large Industries and Power Intensive Industries. **Same may be revisited**.
- Accordingly, projections for FY24-25 may be reviewed wherever >25% increase is projected.
- Licensee needs to submit the details of metered and unmetered sales for these categories, as applicable.

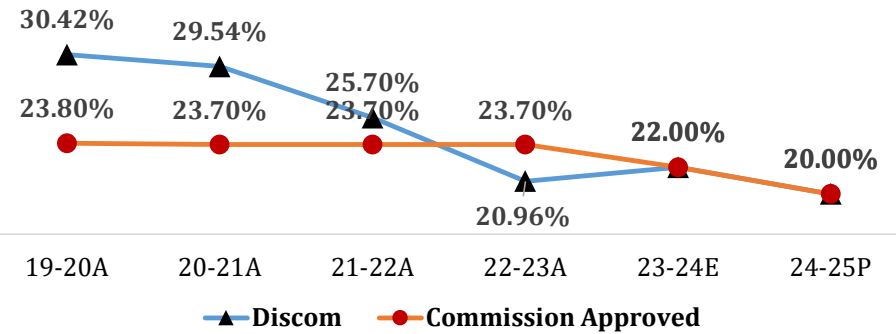
Category	Supply Voltage	FY2-23 (Actual)	FY23-24 (Estd.)	% Increase over FY22-23	FY24-25 (Proj.)	% Increase over FY23-24
Irrigation Pumping and Agriculture	LT	26.61	30.97	16%	38.71	25%
Allied Agricultural Activities	LT	15.24	25.10	65%	38.91	55%
Allied Agro-Industrial Activities	LT	1.79	2.57	43%	3.98	55%
Public Water Works <100 KW	LT	44.96	50.05	11%	52.55	5%
Irrigation Pumping & Agriculture	HT	2.16	3.33	55%	4.17	25%
Allied Agricultural Activities	HT	39.31	53.20	35%	74.48	40%
Allied Agro-Industrial Activities	HT	56.28	65.25	16%	81.56	25%
Large Industry	EHT	224.70	437.78	95%	552.38	26%
Power Intensive Industry	EHT	139.63	293.64	110%	309.58	5%

Overall Losses (Key Performance Parameters)

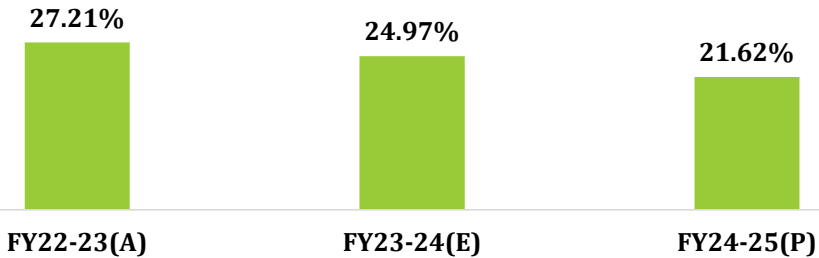
Distribution Loss (%)



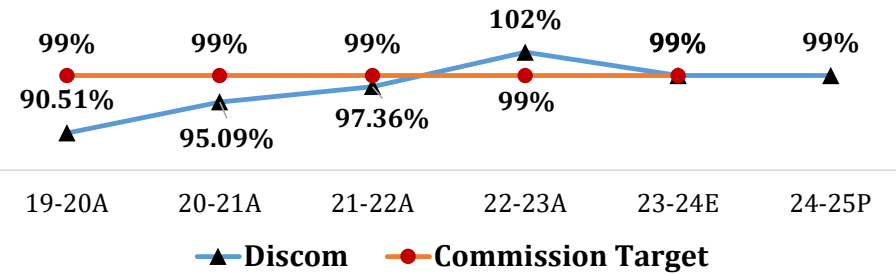
AT&C Loss (%)



LT Loss in the System with 8% loss at HT and 0% loss at EHT levels



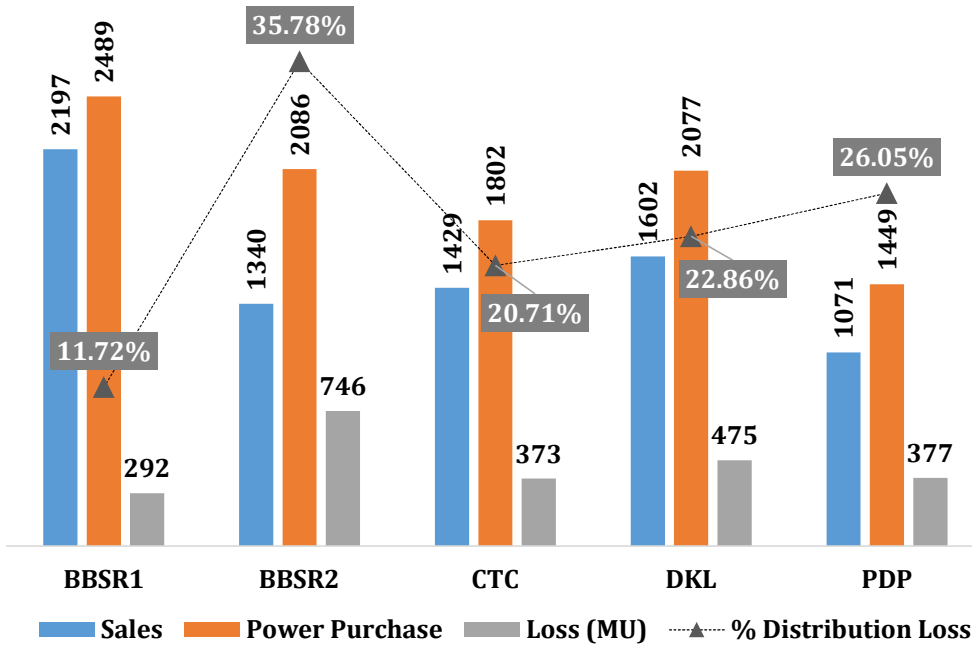
Collection Efficiency (%)



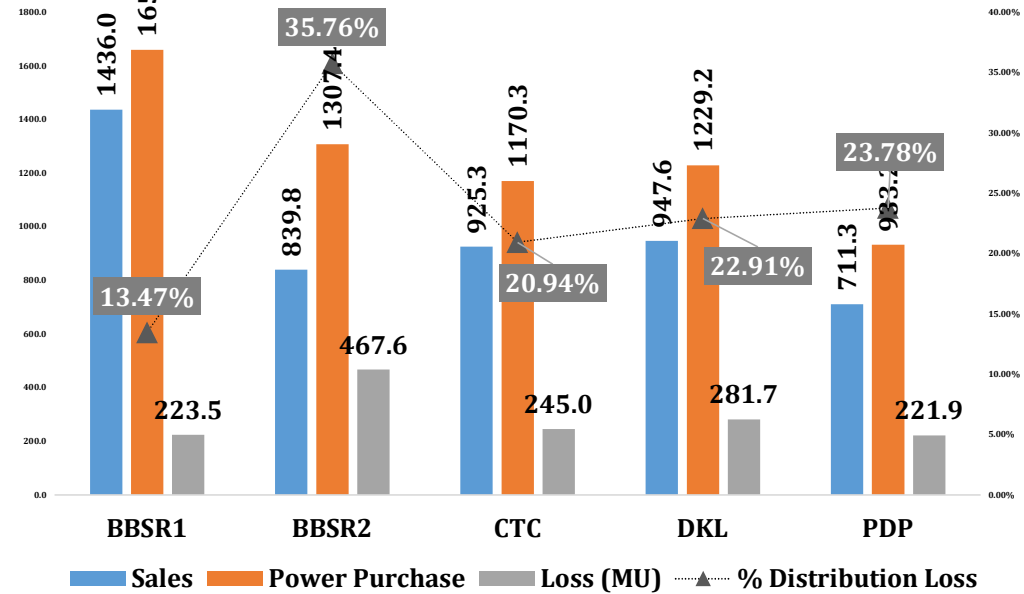
- AT&C and Distribution loss have decreasing trend though approval is constant. **Actual performance may be reviewed with targets given in vesting order.**
- The HT loss of 8% needs to be revised as they have been constant for long period. **Form F-27** to be submitted with all details.
- LT Distribution losses are about 27% (FY 22-23 actual) and 25% (FY 23-24 estimated), if the HT loss of 8% and EHT loss of 0% is considered.
- The collection efficiency achieved in FY22-23 was of **>100%**.

Circle Wise Performance

Circle Wise Performance (FY2022-23)



Circle Wise Performance (FY2023-24)
(1st Half of FY23-24)

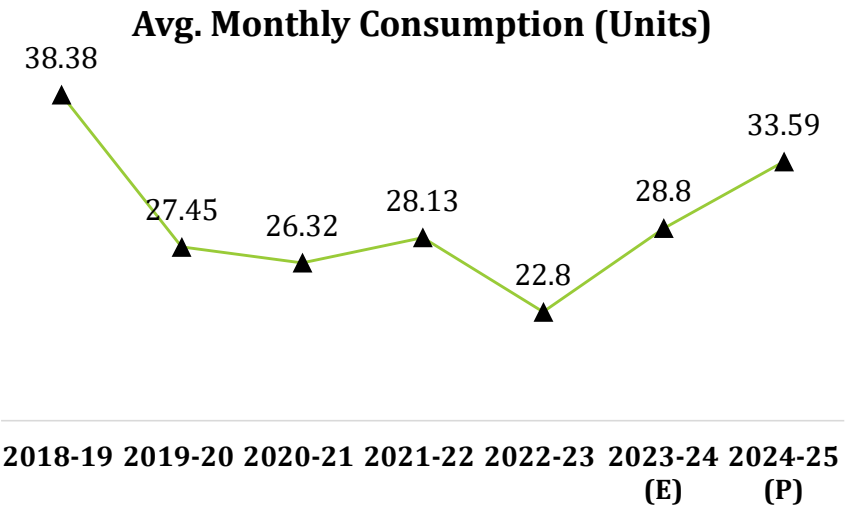


- No visible change in performance observed.
- Loss levels of all the Circles are at par with last years performance figures

Growth of BPL (Kutir Jyoti) Consumers

Year	No of Consumers	% increase in no of consumers from past year	Consumption (MU)	% increase in consumption from past year	Consumption per consumer per month (in Unit)
2018-19	1,15,978	-24.16%	53.41	11.06%	38.38
2019-20	1,03,782	-10.52%	34.18	-36.00%	27.45
2020-21	80,817	-22.13%	25.53	-25.31%	26.32
2021-22	41,746	-48.35%	14.09	-44.81%	28.13
2022-23	36,045	-13.66%	9.86	-30.02%	22.80
2023-24	28,737	-20.27%	9.93	0.71%	28.80
2024-25	29,024	1.00%	11.7	17.82%	33.59

Year	LT Consumers	Kutir Jyoti	% Kutir Jyoti in Total LT	LT Consumption (MU)	Kutir Jyoti Consumption (MU)	% Consumption in Total LT
2022-23	29,15,853	36,045	1.24%	4,269.00	9.86	0.23%
2023-24	30,63,647	28,737	0.94%	4,897.00	9.93	0.20%
2024-25	31,98,025	29,024	0.91%	5,592.00	11.7	0.21%

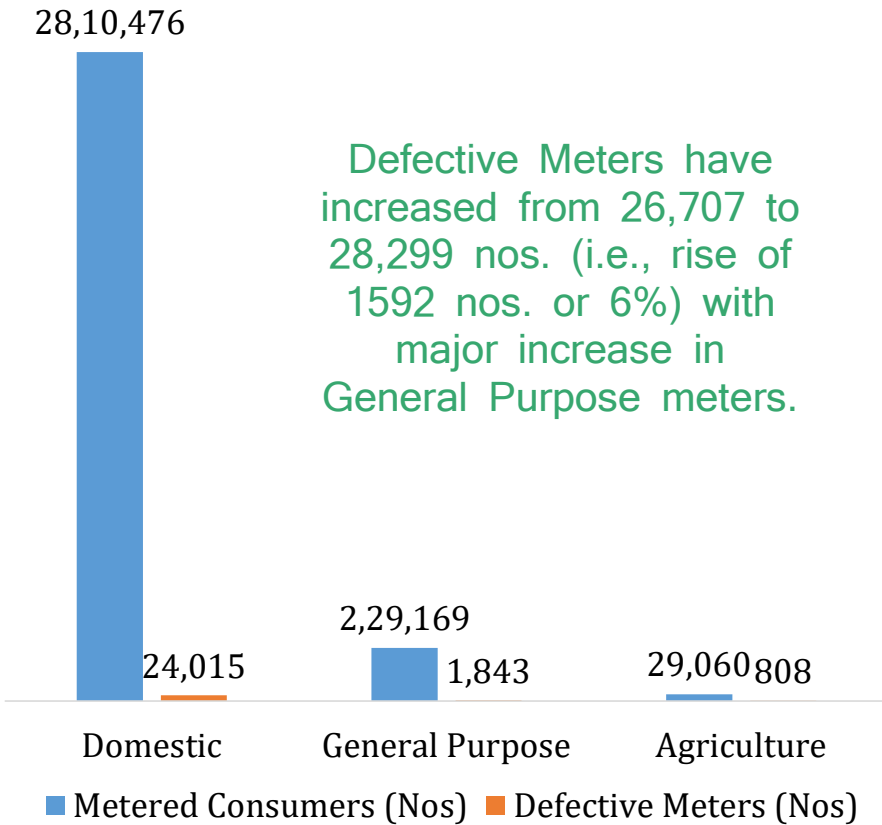


- Large number of BPL consumers are being proposed to be shifted to other Domestic Category. However, 1% increase in BPL category has been projected for FY 24-25, with higher projections in consumption per consumer per month
- Genuine BPL consumers should not be deprived from BPL category tariff and DISCOM should take prudent check of annual consumption of BPL category consumer before changing its consumer category.

Status of billing through correct meter and defective meter (Apr'23 to Sep'23)



Metering Status



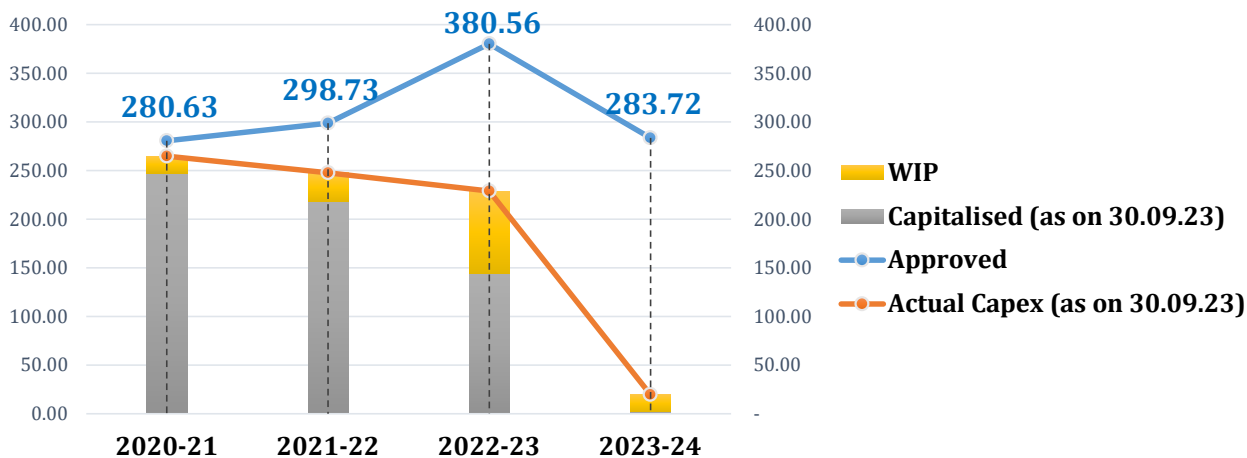
Defective Meters have increased from 26,707 to 28,299 nos. (i.e., rise of 1592 nos. or 6%) with major increase in General Purpose meters.

Category Wise	Metered Consumers (Nos)	Defective Meters (Nos)	% Defective Meters
LT	31,42,312	28,158	0.9%
HT	11826	141	1.2%
EHT	38	--	--
Total	31,54,176	28,299	0.9%
Defective Meters (FY22-23)		26,707	

Category Wise	Defective Meters (Nos) (FY22-23)	Defective Meters (Nos) (FY23-24)	% Inc/Dec
Domestic	22,850	24,015	5%
General Purpose	1,452	1,843	27%
Agriculture	873	808	-7%

Capex (as per Order dated 12.12.2023 in Case 102/2023)

Particulars	Approved for FY2020-21	Approved for FY2021-22	Approved for FY2022-23	Approved for FY2023-24	Proposed for FY2024-25	Approved for FY2024-25
Safety & Statutory	68.17	17.59	17.66	16.00	13.39	11.39
Loss reduction	39.63	67.36	52.85	35.00	30.02	30.02
Reliability	72.48	114.42	131.63	115.00	216.83	196.83
Load Growth	9.00	30.52	118.26	50.00	90.29	77.29
Infrastructure	91.35	68.84	60.16	67.72	65.15	65.15
Total	280.63	298.73	380.56	283.72	415.68	380.68



It is to be noted that Hon'ble Commission has already approved Capex of Rs. 380.68 Cr vide Order dated 12.12.2023 in Case No. 102/2023. This approved cost shall be passed in the ARR as per the norms.



ARR Proposal for FY 2024-25 (Rs. Cr)

S No.	Cost/Income Component	Approved ARR for FY 2023-24	Proposed ARR for FY 2024-25	Percentage of total Dist. Cost	% Rise over Approved ARR
1	Total Power Purchase Cost	3,704.96	4,050.46	66.76%	9.33%
2	Employee Cost	777	856.19	14.11%	10.19%
3	Repair & Maintenance Cost	279.38	357.82	5.90%	28.08%
4	Administrative & General Expenses	142	233.91	3.86%	64.73%
5	Bad & Doubtful Debt including Rebate	51.71	58.14	0.96%	12.44%
6	Depreciation	81.38	137.77	2.27%	69.29%
7	Interest on Security Deposits	60.82	84.84	1.40%	39.49%
8	Interest on Loan	38.55	73.01	1.20%	89.40%
9	Interest on Working Capital	26.28	53.89	0.89%	105.06%
10	Financing Cost	-	1.92	0.03%	-
11	Less: Interest Capitalised	10.94	-	0.00%	-100.00%
12	Less: Emp Cost Capitalised	-	-	0.00%	-
13	Return on Equity incld. Tax on RoE	81	158.94	2.62%	96.22%
14	Total Dist Cost (including Power Purchase Cost)	5,232.14	6,066.88	100.00%	15.95%
15	Less Misc Receipts	109.55	114.00		4.06%
16	Repayment of ASL	-	32.89		-
17	Provisional surplus considered in T.O	83.33	-		-
18	Total ARR Requirement	5,205.50	5,985.78		14.99%
19	Total Revenue (at Existing Rate)	5,170.70	5,814.35		12.45%
20	GAP at Existing tariff (+/-)	-34.80	-171.43		

Employee Expenses (in Rs. Cr.) TPCODL

FY	Proposed	Approved	Actual	% Deviation w.r.t Approved Values
2016-17	433.66	345.43	391.62	13.4%
2017-18	593.57	349.41	465.96	33.4%
2018-19	587.91	367.14	650.49	77.2%
2019-20	677.5	560.83	796.86	42.1%
2020-21	915.4	606.75	598.41	-1.4%
2021-22	772.65	605.7	754.28	24.5%
2022-23	831.71	751.59	752.05	0.1%
2023-24	827.2	776.93	809.1*	4.1%
2024-25	856.2**			

Particular	Approved Cost for FY23-24	Current Year Estimates for FY 23-24	% Inc/Dec w.r.t approved for FY23-24	Projected Cost for FY 24-25	% Inc/Dec w.r.t approved for FY23-24
Existing Employee Cost	345.53	365.89	6%	364.22	5%
Outsourced Employee Cost	64.90	64.90	--	71.39	10%
Additional Employee Cost - CTC	95.80	127.47	33%	152.89	60%
Total Other Staff Cost	48.34	20.16	-58%	24.94	-48%
Less: Employee Cost Capitalized	26.29	26.30	0%	28.93	10%
Less: Arrears (7 th Pay Comm)		2.21			
Net Employee Costs	776.93	809.10	4%	856.19	10%

*Estimates for FY23-24

**Projected for FY24-25

- Increase in existing employee expenses despite no. of employees are declining and outsourcing many activities.
- Staff welfare expenses of Rs 21.52 Cr in FY23-24 is 92% over and above approved for FY23-24. Similarly, projections for FY 24-25 is considerably higher.
- For current financial year i.e. FY23-24, the Estimated Employee

Expenses is more than Commission's approved employee expenses by Rs. 34 Cr and similarly projections for FY24-25 is higher than approved figures by Rs. 79 Cr.(or 10%). **This needs to be reviewed.**

- **Similarly, Higher Projected Additional Employee Expenses may also be reviewed.**

Employee strength

Total Employee strength	Previous Year (FY 2022-23)	Current Year (FY 2023-24)	Ensuing Year (FY 2024-25)	Projected % Inc/Dec w.r.t FY23	Projected % Inc/Dec w.r.t FY24
No. of Employees as on : (beginning of the FY)	5,149	5,070	5,184	-2%	2%
No. of Employees added during the year :	89	250	150	181%	-40%
Employees Retd./Expired/resigned during the year :	168	136	138	-19%	1%
No. of employees at closing of the FY	5,070	5,184	5,196	2%	0.23%
Average no. of Employees for the year	5,110	5,127	5,190	0.34%	1%
No. of Million Units Sold	7,639	8,835	9,944	16%	13%
No. of Employees per MU sold	0.67	0.58	0.52	-13%	-10%
No. of consumer	30,75,431	32,10,074	33,10,074	4%	3%
No. of employees per 1000 consumers	1.65	1.61	1.57	-2%	-3%

Administrative and General Expenses (Rs. Cr.)

FY (Rs.Cr)	Proposed	Approved	Actual
2016-17	97.67	80.37	114.19
2017-18	99.73	66.51	146.67
2018-19	214.3	63.87	162.2
2019-20	224.52	66.97	179.57
2020-21	283.15	70.82	84.72
2021-22	193.44	82.94	120.83
2022-23	146.84	132.72	132.65
2023-24	163.50	142.01	168.11
2024-25	233.91		

- For FY22-23, Estimated A&G Expenses is more or less equal to the Approved values of the Commission
- For FY23-24, Estimated A&G Expenses are more than approved by Rs.26.10 Cr (or 18%).
- Proposed A&G Expenses are higher than approved values for FY23-24 by Rs.91.90 Cr (or 65%).
- **A&G Expenses for FY24-25 needs to be Reviewed.**

Particulars	Estimate for FY23-24	Projected for FY24-25	Increase in Expenses (Projected)	% Increase
Rental of land, buildings, plant and equipment, etc	7.17	9.25	2.08	29%
Office expenses + Facility Management and House Keeping etc	9.50	10.62	1.12	12%
Insurance Premium	7.00	9.63	2.63	38%
Software & IT expenses	0.53	4.46	3.93	743%
Metering and billing expenses Collection, Payment Transaction Charges, Customer Awareness for Digital/Prompt/Regular Payments, Customer Service (Customer Care, Call Centre, Meter Services etc.)	103.73	144.02	40.29	39%
Other Expenses (Print, contingency, electricity bill, Food, Telephone, Bank charges, Travel, Ads etc.)	32.58	37.03	4.45	14%
DSM Activity	0.00	8.00	8.00	--
Legal & Professional Charges	7.61	10.90	3.29	43%
Total A&G Expenses	168.11	233.91	65.80	39%

Repair and Maintenance Costs (In Rs. Cr.)

FY	Proposed	Approved	Actual / Estimated
2016-17	99.98	92.43	43
2017-18	128.56	110.85	33.52
2018-19	146.02	116.78	31.63
2019-20	134.81	134.63	29.97
2020-21	143.23	139.62	148.8
2021-22	237.27	202.94	203.25
2022-23	252.35	239.85	235
2023-24	291.29*	279.38	279.38
2024-25	358		

Sl.No.	Particulars	Previous Year (FY23) Actual	FY 23-24 H-1 Actual	FY 23-24 H-2 Estimate	Total Estimate for FY23-24	Projected (FY-24-25)
1	Repairs and maintenance to buildings and civil Works	5	2			
2	Repairs and maintenance to plant and machinery	210	103			
3	Repairs and maintenance to furniture, vehicles, etc	20	11			
Total		235	116	163.42	279.38	358*

* R&M on own asset: Rs 253.88 Cr and on Govt asset Rs 61.93 Cr

OERC Form No. F. 13 (a) (in Rs. Cr)

S No	R&M for FY 2024-25	Proposed for FY 2024-25
1	DISCOM's Gross fixed assets(GFA) as on 01.04.2024	6346.95
2	Rate of R & M on GFA	4%
3	R&M on GFA	253.88
4	Govt. (Funded/Grant) Assets as on 01.04.2024	2064.35
5	Rate of R & M on Govt. (Funded/Grant) Assets	3%
6	R&M on Govt. funded Assets	61.93
7	Special R&M	42.00
8=3+6+7	Total R & M	357.81

- Discom has computed R&M on Own Asset @4% of Opening GFA.
- Licensee has submitted 163.42 Cr towards R&M for H-2 of FY24. Details needs to be reviewed for higher R&M estimate.
- Licensee need to submit the breakup of R&M requirement for FY 23-24 as per Regulations 3.9.21 of OERC Tariff Regulations, 2022.
- Proposed R&M cost for FY 2024-25 is significantly higher than that R&M expenses incurred earlier.

Observation of Other Components

○ Provision for Bad Debt :

- **Rs. 58.14 Cr has been proposed for FY 24-25 considering collection efficiency of 99%**
- As per provisions of Regulation 5.8 of the **OERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2022**, The Bad and Doubtful debt during this control period shall be allowed on normative basis of **1% of the total annual revenue billed for sale of electricity.**

Provided that during True-Up, the DISCOMs shall submit the audited annual accounts depicting provision for bad and doubtful debt for the respective years and provisioning for bad debt shall be allowed subject to ceiling of @ 1% of the total annual revenue billed for sale of electricity and provisioning of bad and doubtful debt mentioned in the audited annual accounts, whichever is lower.

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 as an uncontrollable item under the Non-Tariff Income of the year in which such revenue is realised.

- **The provision given in Regulations may be followed.**

○ Depreciation

- **Licensee has proposed Rs. 137.77 Cr towards Depreciation for FY 2024-25 compared to the previous year approval of Rs. 81.38 Cr.**
- The depreciation should be calculated on the approved asset base as on 1.04.2023 at Pre-92 rate for the assets inherited from CESU. Commission may undertake prudence check before allowing the costs. As regards the assets to be added by TPCODL the depreciation rates will be as per pre-99 rates notified by the GoI as per the vesting Order.
- As per Regulation 3.8.6 of RST Regulations 2022, depreciation should not be allowed on the assets funded by Consumer contribution and capital subsidies / grants.

Tariff Rationalization Measures

DPS on Electricity Bills

Re-introducing the DPS for LT Domestic, LT General Purpose and HT Bulk Supply Domestic Consumers.

Submission:

- Hon'ble Commission has already dealt with the matter in Tariff Order for FY23-24, wherein, the Commission observed that the revenue impact of DPS for these small consumers is also not substantial. Therefore, in order to resolve bill disputes quickly, the Commission decides to abolish DPS for LT Domestic, LT General Purpose and HT Bulk Supply Domestic Consumers w.e.f. 01.04.2023.
- As such there seems no inherent benefit of re-introducing DPS on Electricity Bills for such consumers.

Pro-rata Billing

Pro-rata billing for Tariff Slab applicability in case of billing being in deviation to the monthly billing cycle prescribed by the Hon'ble Commission

Submission:

- Considering the present arrangement, suitable decision may be taken.
- Discom suggestion may be looked into by Hon'ble Commission

Tariff Rationalization Measures

Meter Cost to be recovered in Tariff instead of through Meter Rent

Expenditure on Meters for consumers should be a part of the Capex plan that needs to be approved by the Hon'ble Commission.

Submission:

- It is also to be noted that under RDSS, Smart Metering is to be done in different Phases within the entire operational area of the Discom.
- Smart Meters with pre-payment feature means the recharge amount will be available to Utility in advance. Billing and metering cost will reduce significantly.
- Cost-benefit analysis is required from Discom.

KVAH billing for LT Small and Medium Industry Consumer

KVAH billing for LT Small and Medium Industry consumers to promote encourage the consumer to install the capacitor bank

Submission:

- Discom may be asked to carry out impact assessment study on transition from kWh billing to kVAh billing for such consumer category considering yearly average power factor based on last three years data.
- Discom may also be asked to conduct consumer awareness programs within their operational area to explain the concept of kVAh billing and its implications to relevant consumers so that the consumers are prepared and kVAh based billing may be implemented.

Tariff Rationalization Measures

Encouragement towards Ebill

Discount of Rs 10 per Bill per Month may be given to those who opt for EBill.

Submission:

- The option for E-Bill or use of electronic media is in the interest of the Consumers.
- MoP through the Electricity (Rights of Consumers) Rules 2020 and its amendments thereof also promotes use of online means for bill payment and providing rebate to such consumers.
- The option may be looked into by the Hon'ble Commission

Creation of Corpus for Meeting Natural Calamities

Creation of fund for such disaster management and to restore power supply in quick time. Accordingly, separate charge of Rs.2 per month may kindly be allowed to be recovered from all the consumers through energy charges.

Submission:

- Considering the present arrangement, suitable decision may be taken.
- Discom suggestion may be looked into by Hon'ble Commission

Tariff Rationalization Measures

Revision of Reconnection Charges

The Charges have been fixed way back on 1st April 2012 and the cost of reconnection has also gone up.

Submission:

- Discom submission may be considered and reconnection charges may be revised by Hon'ble Commission

Standard Service Connection charges for 3-PH LT

Discom has submitted that based on the average length of service cable, a standard cost of service connection charges for three phase LT connections is to be defined

Submission:

- Considering the present arrangement, suitable decision may be taken.
- Discom suggestion may be looked into by Hon'ble Commission

Billing of Public Lighting

TPCODL proposes that wherever meters are not installed billing should be considered assuming 11 hours burning time taking the average use of summer and winter seasons. Also, all new streetlight points under different Govt. schemes shall be metered mandatorily.

Submission:

- Meter should be mandatorily installed for any connection to avoid any kind of dispute.
- Billing can be done as per provisions in applicable regulations.

Other Special Considerations

Expenditure for Energy Police Station

Approval of the cost of additional Police Personnel earmarked and deployed for working exclusively with Discom. The estimated cost per location would be however Rs 42 Lakhs.

Submission:

- Benefits realised/ potential benefit details be submitted.
- Discom submission may be considered by Hon'ble Commission after prudence check of costs and necessity of Energy Police.

Approval of Interest for purchase of EVs

Approval of the Hon'ble Commission towards expenses on account of interest for purchase of EVs

Submission:

- No bearing of such cost in ARR. Additional burden on consumers if passed on.
- EV Advance Policy may be reviewed by Hon'ble Commission

Issues related to Supply Code 2019

- Relaxation in Documents to providing new Connections:
- Agreement for supply
- Extension of Time period for temporary connections:

Submission:

- Above provisions should be aligned with the MoP Rules as amended from time to time or should be governed strictly as per the provisions of the Supply Code.
- Wherever, possible Hon'ble Commission may consider issuing Practice Directions regarding the same.



Thank You

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