



Analysis of ARR and Tariff Proposal of TPSODL for FY 2023-24- Public Hearing

DATE : 24 FEBRUARY 2023

BY

WORLD INSTITUTE OF SUSTAINABLE ENERGY

(CONSUMER COUNSEL)

PUNE

Demand Forecasting



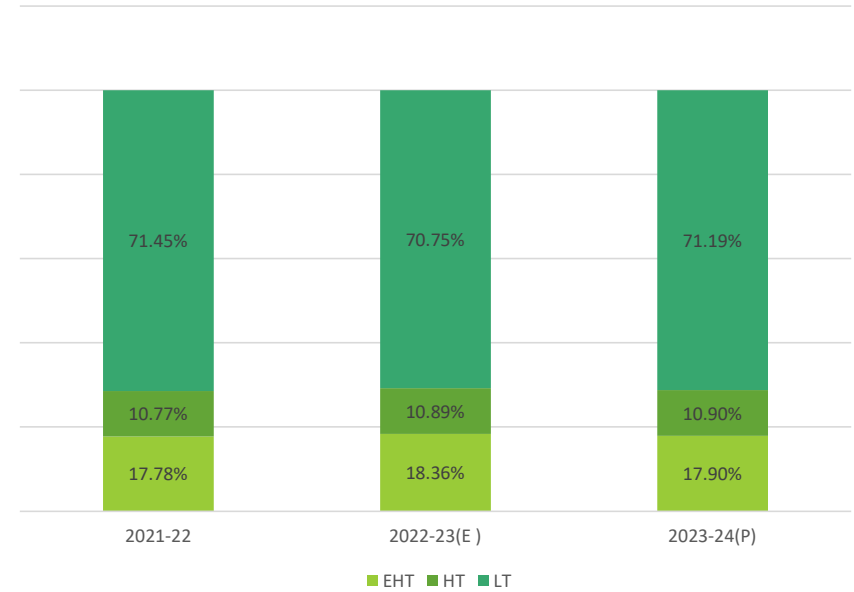
	Sales (MUs)							Consumers (Nos)			
	FY 2021-221 (MU)	FY 2022-23 (MU)			FY 2023-24 (MU)			1 April 2021	1 April 2022	1 April 2023	% over 1 April 2022
	Actual	Proposed	Approved	Revised	Projected	Projected % over approved of FY 2021-22	Projected % over revised of FY 2022-23				
LT	2,158.83	2,158.83	2,352.70	2,385.09	2,552.77	8.51%	7.04%	2,339,393	2,384,539	2,422,870	1.61%
HT	325.32	292.45	350.00	367.22	391.29	11.71%	6.54%	1,707	1,555	2,185	40.51%
EHT	537.37	480.79	590.00	619.34	642.47	8.81%	3.72%	16	18	18	0.00%
Total	3,021.52	3,127.71	3,292.70	3,371.65	3,586.54	8.91%	6.38%	2,341,116	2,386,112	2,425,073	1.63%
LT sale % of Total	71.45%	69.02%	71.45%	70.75%	71.19%						
Power purchase	3,941.54	4,170.00	4,390.00	4,495.36	4,781.26						

- In FY 2023-24, LT consumer growth is 1.61%, and HT consumer growth is 40.51%.
- HT consumers reduced from 1797 in 21-22 to 1555 in FY 22-23 and again increased to 2185 in FY 23-34. However, HT Sales are not showing similar trend.
- LT sales need to be rationalized. LT projected sales for FY 23-24 is 7.04% higher against FY2022-23 LT sales estimates.

Electricity Consumption Pattern

	2021-22	2022-23(E)	2023-24(P)
LT consumers	2,339,393	2,384,539	2,422,870
LT consumption (MU)	2,158.83	2,385.00	2,553.00
Per consumer use per month (kWh)	76.90	83.35	87.81
HT consumers	1,707	1,555	2,185
HT consumption (MU)	325.32	367.00	391.00
Per consumer use per month (kWh)	15881.66	19667.74	14912.28
EHT consumers	16.00	18.00	18.00
EHT consumption (MU)	537.37	619.00	642.00
Per consumer use per month (kWh)	2798802.08	2865740.74	2972222.22
Total consumption	3,021.52	3,371.00	3,586.00

Consumer Categorywise % Sales

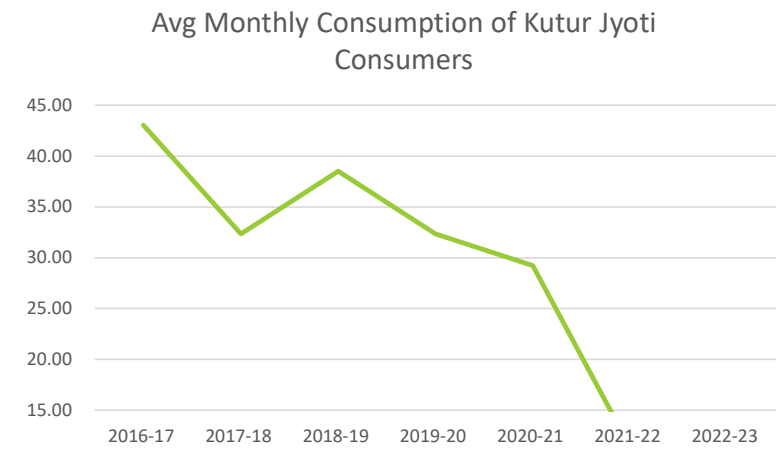


- The LT, HT and EHT sales percentage within the FY is almost constant.
- Licensee has about 75% of the total sales towards LT consumers.
- Licensee has proposed substantial increase in allied agriculture and Agro-industrial sales in 2023-24

BPL (Kutir Jyoti) Consumers and Consumption Trend

Year	No of Consumers	% increase in no of consumers Over past year	Consumption (MU)	% increase in consumption from past year	Consumption per consumer per month (in Unit)
2016-17	404,454	40.82%	209	45.94%	43.06
2017-18	363,322	-10.17%	141	-32.54%	32.34
2018-19	326,639	-10.10%	151	7.09%	38.52
2019-20	399,506	22.31%	155	2.65%	32.33
2020-21	364,416	-8.78%	127.8	-17.55%	29.22
2021-22	269,612	-26.02%	36.86	-71.16%	11.39
2022-23	145,724	-45.95%	20	-45.74%	11.44
2023-24	110,203	-24.38%	20	0.00%	15.12

Year	LT Consumers	Kutir Jyoti Consumers	Kutur Jyoti Consumers Out of LT %	LT Sales in MU	Kutir Jyoti sales in MU	Kutur Jyoti Sales as % of Total LT
2021-22	233,939	269,612	115.25%	2,158.83	36.86	1.71%
2022-23	2,384,539	145,724	6.11%	2,385.09	20	0.84%
2023-24	2,422,870	110,203	4.55%	2,552.77	20	0.78%

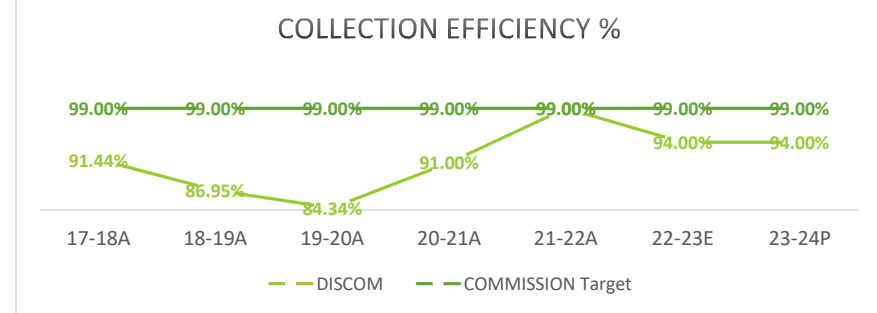
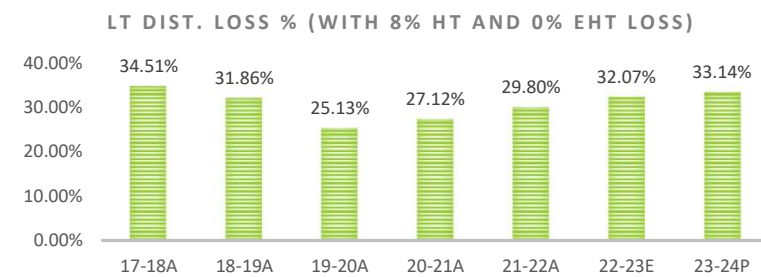
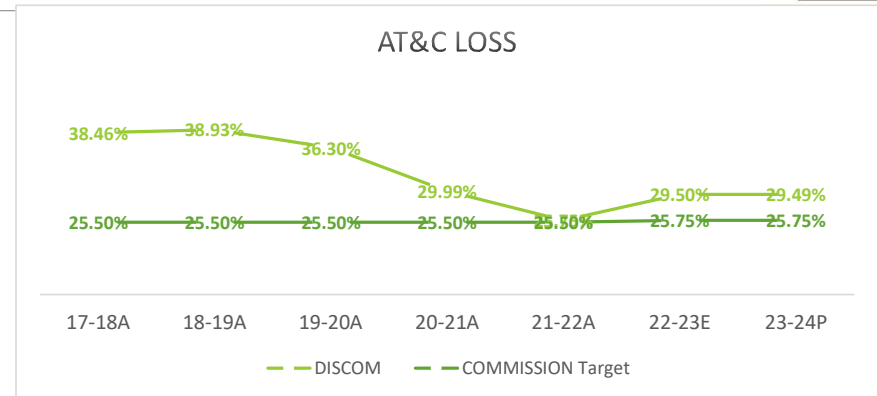
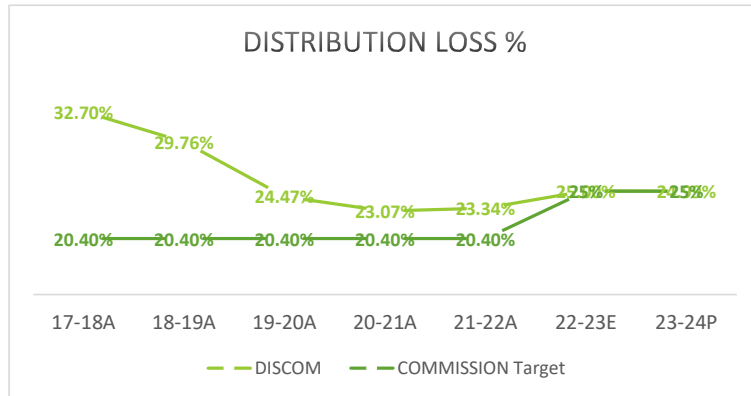


- Average monthly consumption of BPL consumers is 15.12kWh per month..
- BPL consumers and sales is reducing.
- Genuine BPL consumers should not be deprived from BPL category tariff and DISCOM should take prudent check of annual consumption of BPL category consumer before changing its consumer category

ARR Proposal for FY 2023-24 (Rs. Cr)

Cost/Income Component	ARR Approved for FY 2022-23	ARR for FY 2023-24	Percentage of total Dist Cost	% Rise over Approved ARR
Total Power Purchase Cost	1120.24	1219.93	53%	8.90%
Employee Cost	430.79	639.14	28%	48.36%
Repair & Maintenance exp.	90.24	155.40	7%	72.21%
Administrative and General Expenses	77.25	137.47	6%	77.95%
Provision for Bad & Doubtful Debts	12.99	19.86	1%	52.86%
Depreciation	32.03	62.09	3%	93.86%
Interest on loan and S.D	17.26	66.75	3%	286.73%
Total Operation & Maintenance and Other Cost	660.56	1080.71	47%	63.61%
Less: Employee cost capitalised	28.37	30.24	1%	6.59%
Less: interest Capitalised		0.00		
Return on equity	32	54.14	2%	69.19%
Tax on ROE				
Carrying Cost on Regulatory Asset/Liability				
Interest on ASL				
Expenditure of DSM				
Total Distribution Cost	664.19	1104.61	48%	66.31%
Less: Miscellaneous Receipt/ Non tariff Income	35.16	55.57	2%	58.05%
Net Distribution Cost(B)	629.03	1049.04	46%	66.77%
True up of Surplus/(Losses) shown for FY 2021-22		0		
Provisional Surplus considered	60	0		-100.00%
Contingency reserve				
Total Special Appropriation (C)		20.8	1%	
Total Revenue Requirement (A+B+C)	1689.27	2289.77	100%	35.55%
Expected Revenue(Full year)	1694	1985.81		17.23%
GAP at existing(+/-)	4.73	-303.96		

Overall Losses



- AT&C and Distribution loss have decreasing trend though approval is constant. The gap of approve and actual needs to reduce further and lower approval target is needed.
- Considering the increasing electronic payment the collection efficiency should improve. The collection efficiency proposed for current year is 94%

- The HT loss of 8% needs to be revised as they are constant for long period .
- LT Distribution losses are about 32% and 33% for current and ensuing FY if the HT loss of 8% and EHT loss of 0% is considered.

Employee Expenses

Employee Expenses (Rs.Cr.)			
Year	Proposed	Approved	Actual
2016-17	323	190	286
2017-18	385	225	318
2018-19	368	254	397
2019-20	398	358	389
2020-21	398.68	370.88	363.60
2021-22	416.27	404.76	463.33
2022-23	578.76	430.79	545.85
2023-24	639.14		

ADDITIONAL INFORMATION		Previous Year	Current Year	Ensuring Year
1	No. of Employees as on :	2333	2782	3232
2	No. of Employees added during the year	347	528	526
3	Employee Retd/ Expired/ resigned during the year	112	79	76
4	Average no. of Employees for the year	2451	3007	3457
5	No. of Million Units Sold	3021	3372	3586
6	No. of Employees per MKWh sold	0.81	0.89	0.96
7	No. of consumer	2394000	2442000	2490000
8	No. of employees per 1000 consumers	1.02	1.23	1.39

- Actual employee expenses is well above the approved cost in current FY.

Employee Cost in Rs Cr.

Particulars	FY 2021-22	FY 2022-23	FY 2023-24	YOY rise 22-22		YOY rise 22-23	
				% of FY 23-24 to 22-23	YOY rise 22-23 to 23-24	% of FY 23-24 to 22-23	YOY rise 22-23 to 23-24
Salaries and allowance	166.75	158.18	167.42	26%	95%	106%	
Contractual Obligation	1.75	0.00	0.00				
Outsource Obligation	65.34	166.29	200.80	31%	255%	121%	
Total Other Staff Cost (13 to 20)	2.82	0.00	0.00				
Staff Welfare Expenses	3.02	3.32	20.33	3%	110%	612%	
Terminal Benefits	185.41	130.51	139.03	22%	70%	107%	
	425.10	458.29	527.58	83%	108%	115%	
No of Employees	1858	1779	1703				
Cost / Employee In Rs Cr	0.090	0.089	0.098				
Total Employee Cost	38.23	87.56	111.55	17%	229%	127%	
Employees	475	1003	1529				
Cost / Employee In Rs Cr	0.080	0.087	0.073				
Total Cost in Rs Cr	463.33	545.85	639.14	100%	118%	117%	

- Employee cost increased by 18% and 17% in FY 22-23 and FY 23-24.
- Cost per Employee of new employees is less than the old employees
- Outsourced obligation has increased considerably from Rs 65.34 Cr in FY 21-22 to Rs 166.29 in Rs 22-23 to Rs 200 Cr in 23-24

Repair and Maintenance Costs

FY	Proposed	Approved	Actual	Particulars	Previous Year	Actual for first six months of current year	Current Year	Ensuing Year
					2021-22	2022-23		2023-24
2017-18	109.78	34.91	6.74	Civil repairs & maintenance	5.97	5.54	11.09	11.64
2018-19	125.46	39.19	6.78	Transmission line repairs & maintenance	-	0.00	0.00	-
2019-20	73.88	44	4.59	Distribution line repairs & maintenance	78.54	65.22	132.35	141.70
2020-21	85.01	45.96	6.20	Consumer service maintenance		0.00	0.00	0.00
2021-22	86.81	55.36	90.68	Street lighting maintenance	-	0.00	0.00	-
2022-23	137.91	90.24	145.40	Transformer maintenance	5.42	0.00	0.00	0.00
2023-24	155.40			Other repairs & maintenance	0.75	0.98	1.96	2.06
				Additional Repair & Maintenance for RGGVY & BGJY			0.00	0.00
				TOTAL	90.68	71.75	145.40	155.40

- Drastic hike in R&M expenses proposed by licensee over and above the approved R&M expenses. The Dist Line R&M increased from Rs.78.54 Cr to Rs132 Cr in current FY to Rs 141.70 Cr in ensuing FY

- The Current years R&M is proposed to be above the commissions approved R&M for 21-22 which is not acceptable.
- Increased R&M should reflect increase in reliability and quality power further should reduce the AT&C losses.

Administrative and General Expenses (Rs. Cr.)

Year	Proposed	Approved	Actual
16-17	65.73	39.42	29.03
17-18	59.06	26.12	34.59
18-19	65.77	29.95	37.96
19-20	76.72	33.95	27.41
20-21	85.22	35.49	38.33
21-22	58.23	45.13	96.76
22-23	113.82	77.25	123.40
23-23	137.47		

- A&G Expenses approved in FY 2022-23 were 77.25Cr and Licensee has requested for 123/40Cr as A&G Expenses. The proposed Expenses are 160% higher.
- As per Regulation A&G expenses were approved as 7% over the existing A&G expenses and some additional expenses are allowed as per allowed.
- However, Metering, Billing and Collection (MBC) Expenses have Rs 5.43 Cr additional demand over and above 7% hike. Rest all A&G expenses heads have 7% escalation over the last FY.
- .

Observation of other components

○ Provision for Bad Debt :

- **Rs. 19.86 Cr proposed for FY 2022-23 considering collection efficiency of 99%**
- The licensee has submitted, to consider the bad debts equivalent to 1% of receivables .
- **Accordingly, Rs. 15.62Cr. (1% of LT and HT revenue, 1279.78 + 282.94) may be allowed.**
- Licensee shall audit the receivables, collect receivables and fund the working capital requirements instead of putting the financial burden on the consumers due to provision of huge bad debts.
- Current year billing efficiency of 94% is very low despite of proposing huge expenditure proposed for metering, billing and revenue collection activity.

○ Depreciation

- **Licensee has proposed Rs. 62.09 Cr. towards depreciation compared to the previous year approval of Rs. 32.03 Cr.**
- Depreciation has been provided only on assets available at the beginning of the year and no depreciation has been provided on assets created during the year and depreciation should not be allowed on the assets funded by Consumer contribution and capital subsidies / grants.

Collection of Old Arrears

FY-2020-21 (3 Months)													Rs. in Crore	
Sl No	Particulars	April	May	June	July	August	September	October	November	December	January	February	March	TOTAL
1	Arrear collection net of taxes & duties										9.24	7.44	26.31	42.99

Previous Year													Rs. in Crore	
Sl No	Particulars	April	May	June	July	August	September	October	November	December	January	February	March	TOTAL
1	Arrear collection net of taxes & duties	3.29	1.18	2.24	3.49	3.45	4.03	3.60	5.59	7.16	6.48	10.00	33.76	84.29

Estimate for Current year													Rs. in Crore	
Sl No	Particulars	April	May	June	July	August	September	October	November	December	January	February	March	TOTAL
1	Arrear collection net of taxes & duties	11.16	3.84	4.40	4.53	4.58	5.51							34.01

Licensee agreed to collect Rs 10 Cr, Rs 30 Cr and Rs 30 Cr in FY 22, 23 and 24 respectively. Licensee has collected more than the given target.



Thank You

WORLD INSTITUTE OF SUSTAINABLE ENERGY (WISE) PUNE

- Policy research and advocacy
- Energy Regulations and Tariff
- Energy Audit and Efficiency
- Renewables - Solar, Wind, Biomass
- Climate change and Sustainability
- Training and Capacity Building

Tariff Rationalization Measures

Inclusion of NALCO and IMFA as consumer of TPSODL

NALCO and IMFA are EHT consumers being located within the licensee area of TPSODL are at present consumers of GRIDCO. Licensee requested to transfer these two consumers under its EHT consumers portfolio

- NALCO and IMFA were transferred to GRIDCO as a part of reform programme and the CGPs were pre-existing by virtue special long term agreement made even prior to coming up of DISCOMs in 1999.
- Post reforms both the CGPs remained with CESU (now TPCODL) area and the industries were located in SOUTHCO area (now TPSODL). Bothe the industries were paying the transmission charges of OPTCL.
- As per clause 5.1(a) of the Transmission and bulk supply license, GRIDCO is permitted to enter in to an agreement for ancillary services including the emergency power supply. The emergency drawl of power by CGPs is minimal on the contrary the injection by CPP's is more.
- The arrangement of generating plant i.e. CGP and Industries is at different place is of a peculiar nature and different from other industries having captive CGPs within the premises of industries. Due to this peculiarity the power supply for both the companies was kept with GRIDCO through an MOU signed during the OSEB period. GRIDCO collects revenue at the rate of emergency power approved by Hon. Commission for excess drawl at consumption point. The entire activity was kept in isolation with the distribution company and hence the NALCO and IMFA are not the consumers of DISCOM. Accordingly, the revenue collected by GRIDCO from NALCO and IMFA by way of sale of emergency power is being adjusted in ARR of GRIDCO.
- **Hon. Commission had disposed-off the claims of SOUTHCO and CESU vide case no 34 of 200 and 26 of 2001 and 27 of 2001 in the order dated 31.07.2001 and hence the licensees request in the petition of ARR be rejected in this regards.**