



Analysis of ARR and Tariff Proposal of TPCODL for FY 2022-23 Public Hearing

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BY

WORLD INSTITUTE OF SUSTAINABLE ENERGY

(CONSUMER COUNSEL)

PUNE

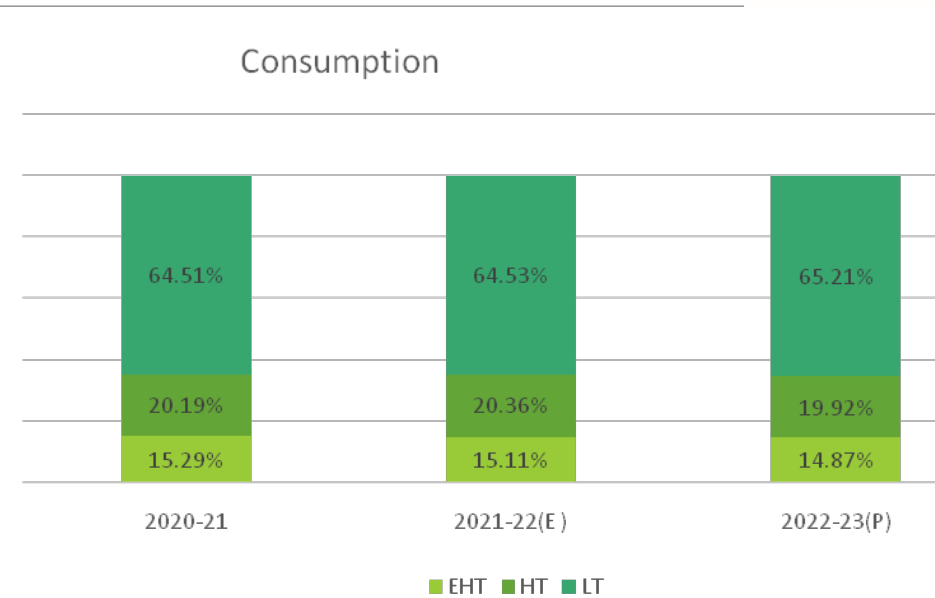
Demand Forecasting

	Sales							Consumers			
	FY 2020-21 (MU)	FY 2021-22 (MU)			FY 2022-23 (MU)			1 April 2020	1 April 2021	1 April 2022	% Apr
	Actual	Proposed	Approved	Estimated	Projected	Projected % over approved of FY 2021-22	Projected % over estimates of FY 2021-22				
LT	4,000.05	4,000.05	4,821.81	4,457.99	4,806.43	-0.32%	7.82%	2,689,820	2,650,439	2,901,397	9
HT	1,252.12	1,340.21	1,340.21	1,406.43	1,468.12	9.54%	4.39%	7,486	8067	8413	4
EHT	948.15	905.23	997.78	1,043.75	1095.93	9.84%	5.00%	29	32	33	3
Total	6,200.32	6,930.12	7,159.80	6,908.17	7,370.48	2.94%	6.69%	2,697,335	2,658,538	2,909,843	9
sale % of Total	64.51%	57.72%	67.35%	64.53%	65.21%						
power purchase	8,370.43	9,194.80	9,290.00	9,038.42	9,449.34						

- In HT, number of consumers are increasing from 8067 (FY21-22) to 8413 (FY22-23) i.e. addition of 346 HT consumers but sales is slightly increasing by 61.69MU in (FY 22-23)
- LT sales projected to increase from 4457.59 (FY21-22) to 4806.43 (FY 22-23). i.e. 7.82% increase.
- Higher LT projections leads higher need of cross subsidy and thereby impacts tariff adversely

Electricity Consumption pattern across diff categories

	2019-20	2020-21 (E)	2021-22(P)
LT consumers	2,689,820	2,650,439	2,901,397
Total consumption (MU)	4,000.05	4,457.99	4,806.43
Average consumer use per month kWh	123.93	140.17	138.05
HT consumers	7,486	8,067	8,413
Total consumption (MU)	1252.12	1406.43	1468.12
Average consumer use per month kWh	13938.46	14528.64	14542.18
EHT consumers	29.00	32.00	33.00
Total consumption (MU)	948.15	1043.75	1095.93
Average consumer use per month kWh	2724568.97	2718098.96	2767500.00
Total consumption	6,200.32	6,908.17	7,370.48



Share of EHT and HT sales is reducing and the LT sales is increasing from FY 20-21 to FY 22-23

Considerable high sales projections in consumer categories like irrigation, allied agriculture and agro industrial activities proposed.

Licensee needs to submit the details of metered and unmetered supplies for these categories

Consumer Category	Supply Voltage	Consumption in FY 2020-21(MU)	Annual Percentage Rise (%)	Consumption Estimated for FY 21-22 (MU)	Annual Percentage Rise (%)	Consumption projected for FY 22-23 (MU)
Irrigation, Pumping & Agriculture	LT	46.93	7.73%	50.56	30.00%	65.00
Allied Agricultural Activities	LT	5.02	112.32%	10.67	45.00%	15.00
Allied Agro-industrial Activities		3.63	-54.97%	1.64	15.00%	1.00
Irrigation	HT	12.06	33.32%	16.07	35.00%	21.00
Allied Agricultural Activities	HT	28.84	58.11%	45.61	45.00%	66.00
Allied Agro-industrial Activities	HT	42.06	33.79%	56.27	25.00%	70.00

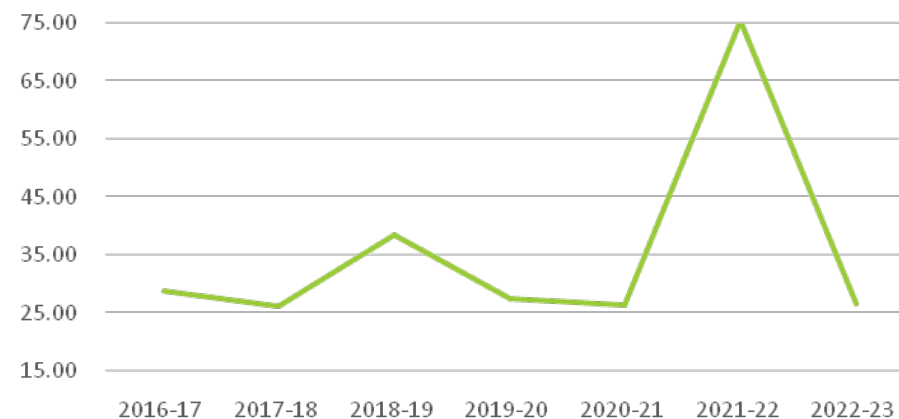
Growth of BPL (Kutir Jyoti) Consumers

	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)
17	180309		62.36	-56.46%	28.8
18	152918	-15.19%	48.09	-22.88%	26.2
19	115978	-24.16%	53.41	11.06%	38.3
20	103782	-10.52%	34.18	-36.00%	27.4
21	80,817	-22.13%	25.53	-25.31%	26.3
22	41,746	-48.35%	37.75	47.87%	75.3
23	136,184	226.22%	43.41	14.99%	26.5

	LT Consumers	Kutir Jyoti	% of Consumers in LT	LT MU	Kutir Jyoti MU	% consumption in LT
21	2,689,820	80,817	3.00%	4,000.05	25.53	0.64%
22	2,650,439	41,746	1.58%	4,457.99	37.75	0.85%
23	2,901,397	136,184	4.69%	4,806.43	43.41	0.90%

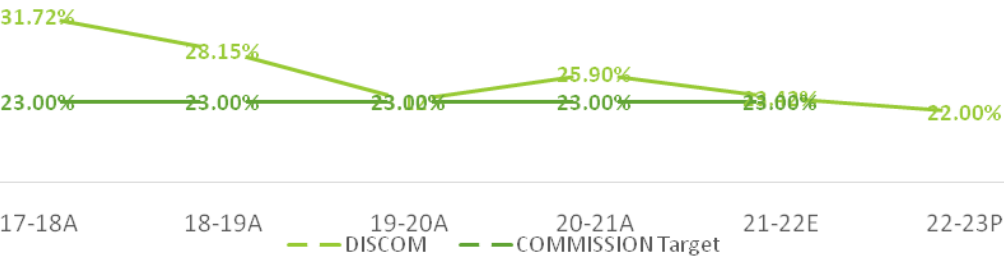
The number of BPL consumers are being proposed to be shifted to other Domestic category. Projection for FY 20-21 need to be reviewed by licensee
 Genuine BPL consumers should not be deprived from BPL category tariff and
 COM should take prudent check of annual consumption of BPL category
 consumer before changing its consumer category

Avg Monthly Consumption of Kutur Jyoti Consumers (kWh)

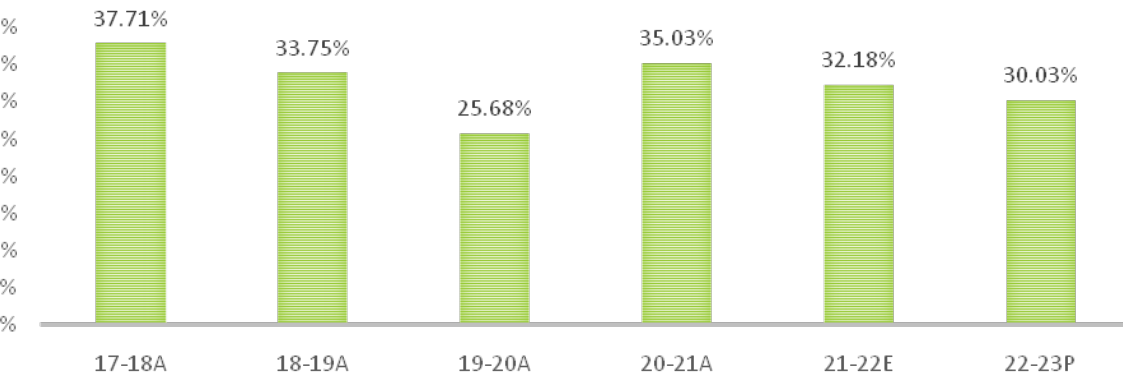


Overall Losses

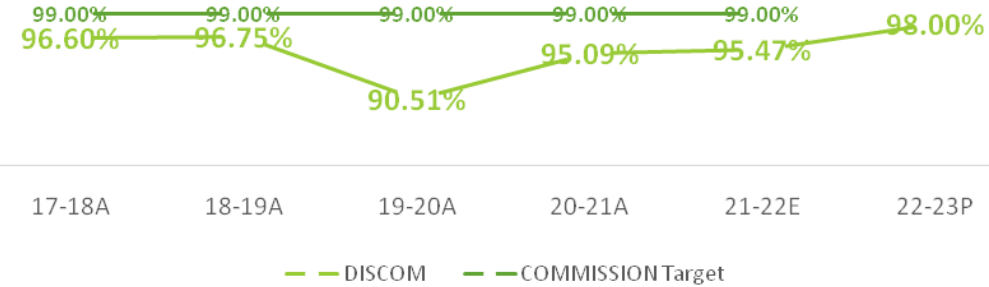
DISTRIBUTION LOSS %



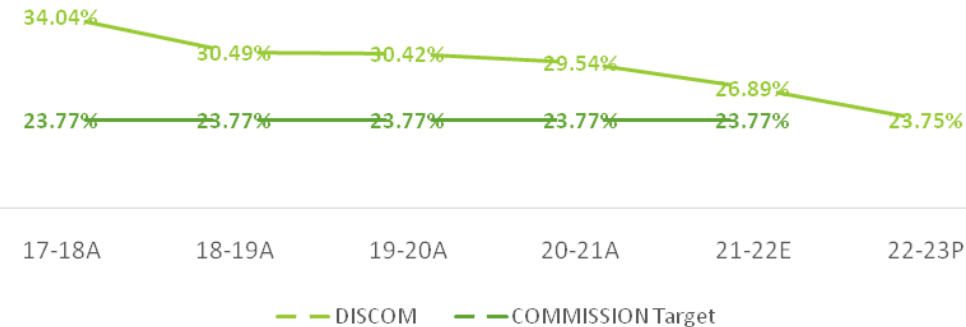
LT DIST. LOSS % (WITH 8% HT AND 0% EHT LOSS)



COLLECTION EFFICIENCY %



AT&C LOSS



AT&C and Distribution loss have decreasing trend though approval is constant. There is need to reduce further and lower targets..

The HT loss of 8% needs to be revised as they are constant for

long period .

- LT Distribution losses are about 30.09% if the HT loss of 8% and EHT loss of 0% is considered.
- . The collection efficiency achieved in 20-21 was of 95.09%.

ARR Proposal for FY 2022-23 (Rs. Cr)

Cost/Income Component	ARR Approved for FY 2021-22	ARR for FY 2022-23	Percentage of total Dist Cost	% Rise over Approved ARR
1 Total Power Purchase Cost	2890.79	2942.03	65.13%	1.7
2 Employee Cost	605.7	831.71	18.41%	37.3
3 Repair & Maintenance Cost	202.94	252.35	5.59%	24.3
4 Administrative & General Expenses	82.94	146.84	3.25%	77.0
5 Bad & Doubtful Debt including Rebate	32.05	41.54	0.92%	29.6
6 Depreciation	43.57	55.99	1.24%	28.5
7 Interest on Loan	33.45	132.78	2.94%	296.9
8 Return on Equity	48	84.66	1.87%	76.3
9 Tax on ROE	0	28.47	0.63%	
10 Special Appropriation Carrying Cost	0	1	0.02%	
Total Dist Cost	3939.44	4517.37	100.00%	14.6
1 Less Misc Receipts	104.8	107.21		2.3
Total ARR Requirement	3834.64	4410.16		15.0
Total Revenue	3835.58	4154.46		8.3
GAP at Existing tariff (+/-)	0.94	-255.70		

Employee Expenses (in Rs. Cr.) TPCODL

FY	Proposed	Approved	Actual
2015-16	358.14	343.94	363.22
2016-17	433.66	345.43	391.62
2017-18	593.57	349.41	465.96
2018-19	587.91	367.14	650.49
2019-20	677.5	560.83	796.86
2020-21	915.4	606.75	598.41
2021-22	773.2	605.70	678.30
2022-23	831.70		

CESU	Executive		Non-Executive	
	Technical	Non-Technical	Technical	Non-Technical
31 st March 21	519	97	3210	825
31 st March 22	511	96	2922	815

Increase in employee expenses despite no. of employees are declining and outsourcing many activities.

Petition

Administrative and General Expenses (Rs. Cr.)

FY (Rs.Cr)	Proposed	Approved	Actual
2015-16	95.77	51.68	82.45
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		

- Estimates of A&G proposed FY 2021-22 are higher than the Commission's approved figure
- Actual A&G expenses need to further come down compared to approved.
- Additional A&G claimed for following

Particulars	Previous Year FY 2020-21 (Jun-Mar) Actual	Total Estimate for CY FY 2021-22	Ensuing Year (FY-22-23)
Land, buildings, plant and equipment, etc	3.41	4.20	7.79
and conveyance	2.33	1.10	2.57
Expenses + Facility Management and House Keeping etc	5.40	8.19	8.10
Insurance Premium	1.13	8.76	8.51
IT & IT expenses	1.65	0.5	4.82
Printing and billing expenses Collection, Payment Transaction Charges, Customer Service for Digital/Prompt/Regular Payments, Customer Service (Cust. Care, Call Meter Services etc.)	41.09	72.68	87.37

Repair and Maintenance Costs (In Rs. Cr.)

FY	Proposed	Approved	Actual / Estimated
015-16	135.47	79.64	37.10
016-17	99.98	92.43	43.00
017-18	128.56	110.85	33.52
018-19	146.02	116.78	31.63
019-20	134.81	134.63	29.97
020-21	143.23	139.62	148.80
021-22	237.27	202.94	203
022-23	252.35		

Sl.No.	Particulars	Previous Year (20-21)	June-Sep of current FY 2021-22)	Estimate for Oct-Mar (H-2)Current Year (21-22)	Total Estimate for FY-21-22	Estimate for FY-22-23
1	Repairs and maintenance to buildings and civil Works	3.93	1.24	3.82	5.06	
2	Repairs and maintenance to plant and machinery	142.17	77.81	112.41	190.22	2
3	Repairs and maintenance to furniture, vehicles, etc	2.70	7.72	0.00	7.72	
	Sub Total	148.80	86.78	116.23	203.00	2
4	Estimated Expenditure for maintaining assets not in the balance sheet of TPCODL	0	0	0	0	
	TOTAL	148.80	86.78	116.23	203.00	

The GFA at the start is 4302.85 Cr. Normative R&M at 5.4% of GFA is Rs. 232.35 Cr as against licensee's proposal of 252.35 Cr for ensuing FY.

Licensee needs to submit the breakup of R&M requirement for the ensuing FY.

- Proposed R&M cost for 2022-23 is comparatively higher than that R&M expenses incurred earlier.

Observation of Other Components

○ Provision for Bad Debt :

- **Rs. 41.54 Cr proposed for FY 2022-23 considering collection efficiency of 99%**
- “The Business Plan order of the Commission dated 20.03.2010 approved collection efficiency of 99% for FY 2011-12 and FY 2012-13. The benchmark of collection efficiency would continue to be at the level of 99% during the third control period also. Accordingly the Bad and Doubtful debt during the third control period would also be allowed @ 1% of the total annual revenue billing in HT and LT sales only.”
- **Accordingly, Rs.32.57 Cr (1% of LT and HT revenue, i.e. 2275.75 + 981.27Cr) may be allowed.**

○ Depreciation

- **Licensee has proposed Rs 55.99 Cr towards depreciation for FY 2022-23 compared to the previous year approval of Rs. 43.57 Cr.**
- The depreciation should be calculated on the approved asset base as on 1.04.2021 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 7.56 of RST Regulations 2014, depreciation should not be allowed on the assets funded by Consumer contribution and capital subsidies / grants.

Tariff Rationalization Measures

Levy of CSS on RE Power (ODL- W, C, N)

Commission has proposed to impose CSS on RE OA Consumers and further withdraw concessional wheeling and transmission charges which are presently limited to 20 % of total charges

Commission:

Concessional charges for RE OA are required for increasing penetration of RE power in the state.

are already exempted under Electricity Act for Captive OA Consumption. So at present CSS is being exempted for Third Party Sale of RE (especially Solar Power OA) .

RE OA drawl by industries in FY 19-20 was 185 MU, in **FY 20-21 was 244** and in FY 21-22 (up to Sept 21) was 1289MU. Licensees total sales in 21-22 is 6760MU. Hence RE OA power has increased to about 19% of licensees total annual sales?

This needs to be checked and licensee may submit details about third party and captive same separately with amount on Rs. Towards wheeling, transmission charges and CSS waiver.

Commission ODL in its petition submitted RE OA sourcing as follows:

State – TPCODL Commission	OA Quantum in MU 20-21	OA Quantum in MU 21-22 (5 Months)
Andhra Pradesh	8	12
Chhattisgarh	17	114
Madhya Pradesh	125	926
Rajasthan	18	74
Odisha	168	1126

- **Odisha accounts 0.54% of National RE capacity (1,05,854MW)**
- Odisha has Solar potential of 25.78 GW of national solar Potential of 750 GW
- State Target to install Solar is 2,377MW of which 1,00,000MW and on 31.1.22 Installation in state is **431.19 MW Solar. (59.22MW Bio.i.e total 490.41MW)**
- There is still lot of scope for RE capacity addition in state and hence such preferential treatment should be continued till the RE penetration in state is increased.

Tariff Rationalization Measures

Introduction of Green Tariff (ODL- C, W)

Green Tariff: Licensee proposed 84 Paise as special green additional tariff for the consumers opting green power.

Discussion: States like Maharashtra has proposed 0.66 Rs/kWh and Karnataka has proposed 0.50 Rs/kWh add-on tariff for procurement of green power.

A green tariff of 0.84 Rs/kWh is proposed by licensee for supply of Green power is good initiative.

However, Licensee needs to ensure that quantum of electricity sourced against green electricity tariff supply to be met on annual basis. Further, the provision to opt Green Tariff should completely remain the consumer and consumer should be allowed to shift to the normal tariff on request with minimum time of one / two months.

Tariff Rationalization proposal for Industries

IF the consumer in FY 21-22 is less than 55% and if the industry improves the same then the licensee has proposed rebate as follows:

>75% to 80% - then rebate of Rs 0.40 Per unit on entire consumption

greater than 80% the rebate of Rs 0.50 per unit on entire consumption is being proposed by licensee.

Proposed for categories like: HT Industrial (M), Large Industry, Power Intensive Industry, Mini Steel Plant etc.

Proposed rebate is beneficial for industries and licensee and may be implemented.



Thank You

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