



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

05 FEBRUARY 2024

BY

WORLD INSTITUTE OF SUSTAINABLE ENERGY

(CONSUMER COUNSEL)

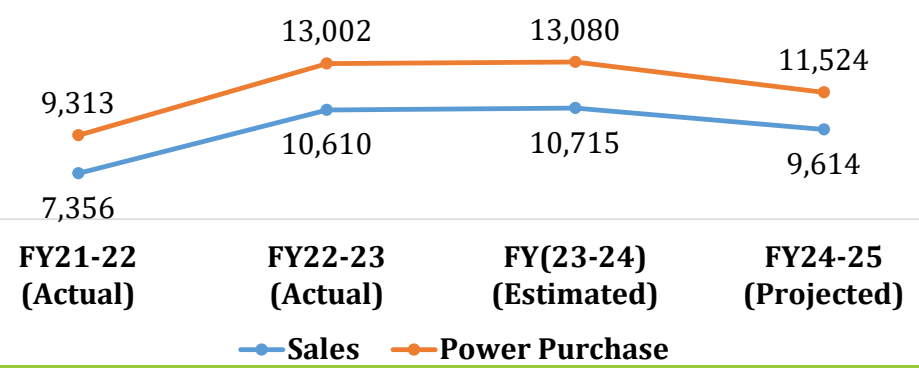
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Demand Forecasting

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	2,582	3,314	3,332	3,341	3,544	6%	6%	22,56,597	22,78,599	20,57,507	-9.70%
HT	2,165	2,123	2,200	2,444	2,590	18%	6%	1,086	1,280	1,344	5.00%
EHT	5,863	5,045	5,352	4,930	3,480	-35%	-29%	39	43	46	6.98%
Total	10,609.62	10,482	10,884	10,714.5	9,614	-12%	-10%	22,57,722	22,79,922	20,58,897	-9.69%
<i>LT sale % of Total</i>	24.34%	31.62%	30.62%	31.18%	36.86%						
Power Purchase (MU)	13,002	12,800	13,286	13,080	11,524	-13%	-12%				

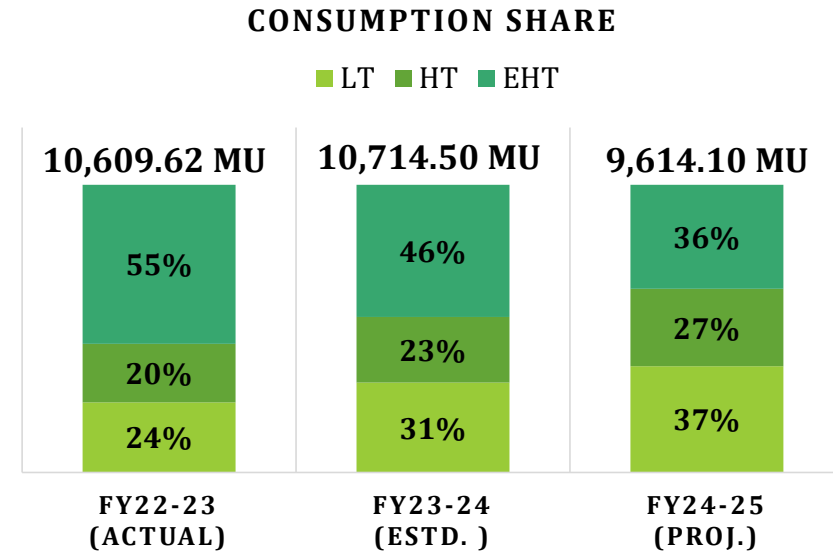
- LT Sales Projection is estimated to increase by 6% whereas, no. of consumers is proposed to reduce by 9.7%.
- Significant reduction in EHT sales has been projected since FY2023-24. This is because Sale through TPA has not been projected for FY24-25.
- **As a result, Power Purchase requirement has also reduced by 12%.**

% Change in Sales & Power Purchase (last 3 Years)



Electricity Consumption Pattern Across Different Categories

Particulars	FY22-23 (Actual)	FY23-24 (Estd.)	FY24-25 (Proj.)
LT consumers	22,56,597	22,78,599	20,57,507
LT consumption (MU)	2,582	3,341	3,544
Per consumer use per month kWh	95	122	144
HT consumers	1,086	1,280	1,344
HT consumption (MU)	2,165	2,444	2,590
Per consumer use per month kWh	1,66,125	1,59,115	1,60,590
EHT consumers	39	43	46
EHT consumption (MU)	5,863	4,930	3,480
Per consumer use per month kWh	1,25,27,130	95,54,264	63,04,348
Total consumption	10,610	10,715	9,614

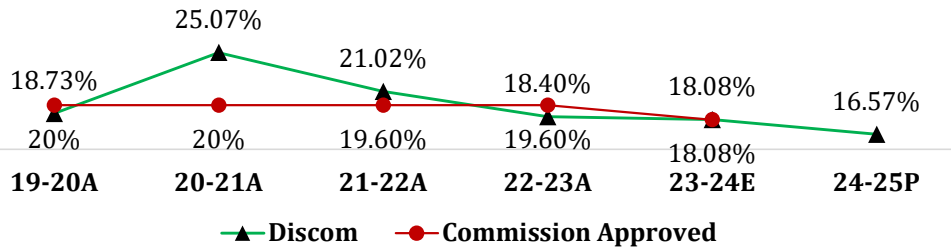


- EHT Sales is projected on the Lower Side by 29%, majorly Sale through TPA has not been projected for FY24-25.
- In other categories such as EHT Heavy Industries, the Sales have reduced considerably when compared to FY22-23.
- For Power Intensive Industries, 147% higher projections have been done in FY24-25.

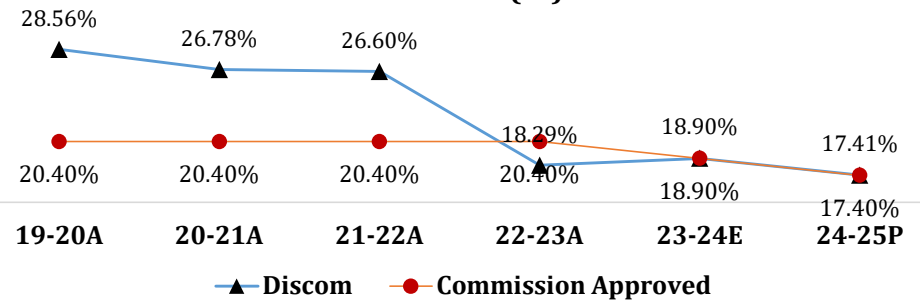
Category	Supply Voltage	FY22-23 (Actual)	FY23-24 (Estd.)	% Increase over FY22-23	FY24-25 (Proj.)	% Increase over FY23-24
Allied Agro-Industrial Activities	LT	2.46	2.50	2%	3.00	20%
Public Water Works <100 KW	LT	54.90	61.00	11%	60.00	-2%
Irrigation Pumping and Agriculture	HT	58.09	80.00	38%	85.00	6%
Allied Agricultural Activities	HT	3.73	5.50	47%	5.60	2%
Allied Agro-Industrial Activities	HT	5.66	8.00	41%	8.20	2%
Heavy Industry	EHT	685.86	250.00	-64%	262.00	5%
Power Intensive Industry	EHT	807.12	642.00	-20%	1583.94	147%
Sale through TPA (@4.75/5.00) incl. Normal Consumption	EHT	2932.83	2500.00	-15%	0.00	-100%

Overall Losses (Key Performance Parameters)

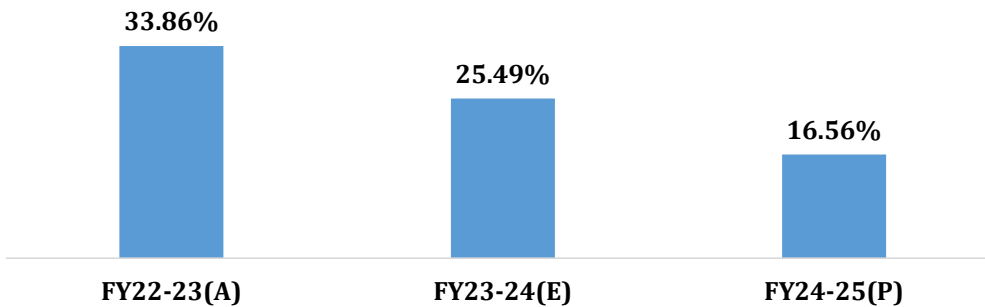
Distribution Loss (%)



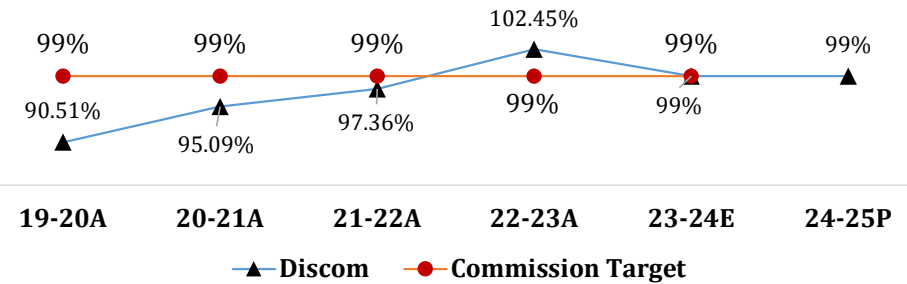
AT&C Loss (%)



LT Loss in the System with 15% HT Loss and 0% LT Loss



Collection Efficiency (%)

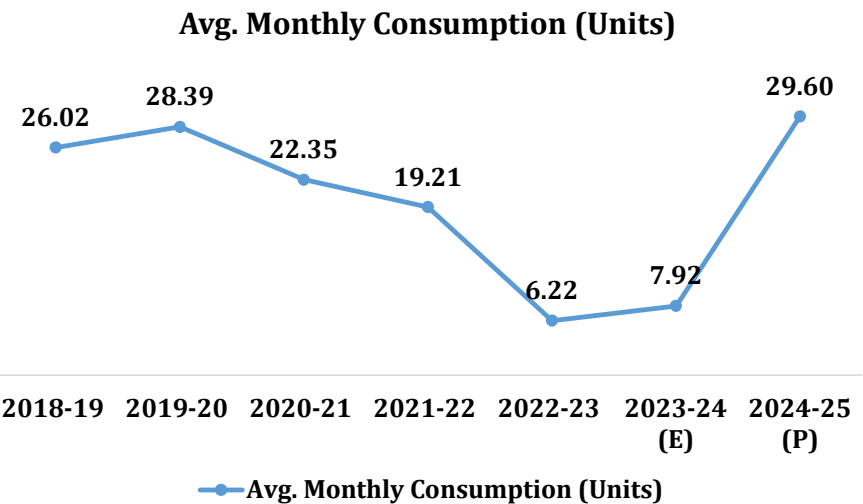


- AT&C and Distribution loss have decreasing trend. **Actual performance may be reviewed with targets given in vesting order.**
- The HT loss of 15% needs to be revised as they have been constant for long period
- **Form T6** : Circle Wise information of losses and power purchase is not provided.
- LT Distribution losses are about 33.86% (FY 22-23 actual) and 25.49% (FY 23-24 estimated), if the HT loss of 15% and EHT loss of 0% is considered.
- The collection efficiency achieved in FY22-23 was of **100%**.

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	1,47,423	-7.03%	46.02	-5.29%	26.02
2019-20	1,43,215	-2.85%	48.78	6.00%	28.39
2020-21	1,33,950	-6.47%	35.92	-26.37%	22.35
2021-22	1,18,806	-11.31%	27.39	-23.75%	19.21
2022-23	1,36,016	14.49%	10.16	-62.92%	6.22
2023-24	1,15,673	-14.96%	11.0	8.32%	7.92
2024-25	56,309	-51.32%	20.0	81.82%	29.60

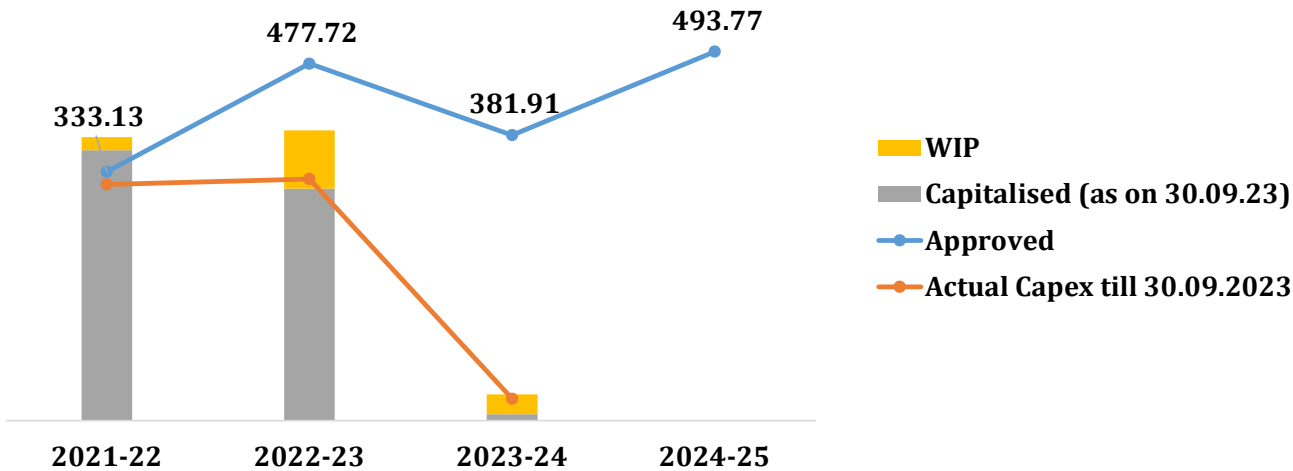
Year	LT Consumers	Kutir Jyoti	% Kutir Jyoti in Total LT	LT Consumption (MU)	Kutir Jyoti Consumption (MU)	% Consumption in Total LT
2022-23	22,56,597	1,36,016	6.03%	2,581.98	10.16	0.39%
2023-24	22,78,599	1,15,673	5.08%	3,340.50	11.00	0.33%
2024-25	20,57,507	56,309	2.74%	3,544.10	20.00	0.56%



- Large number of BPL consumers are being proposed to be shifted to other Domestic Category. **Projections for FY 24-25 need to be reviewed by licensee as with reduced no. of consumers, consumption is projected to be high.**
- **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.**

Capex (as per Order dated 12.12.2023 in Case 101/2023)

Particulars	Approved for FY2021-22	Approved for FY2022-23	Approved for FY2023-24	Proposed for FY2024-25	Approved for FY2024-25
Safety & Statutory	98.48	52.40	34.12	51.53	51.53
Loss reduction	42.48	46.80	59.00	54.61	54.61
Reliability	48.91	118.34	69.48	156.10	141.50
Load Growth	39.71	145.57	67.82	218.27	208.27
Technology /Infrastructure	103.55	114.61	151.49	91.46	37.86
Total	333.13	477.72	381.91	571.97	493.77



It is to be noted that Hon'ble Commission has already approved Capex of Rs. 493.77 Cr vide Order dated 12.12.2023 in Case No. 101/2023. 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	5,528.46	4,770.69	73.29%	-13.71%
2	Employee Cost	580.57	626.59	9.63%	7.93%
3	Repair & Maintenance Cost	281.99	336.86	5.17%	19.46%
4	Administrative & General Expenses	158.12	245.87	3.78%	55.50%
5	Bad & Doubtful Debt including Rebate	62.52	57.51	0.88%	-8.01%
6	Depreciation	72.93	125.98	1.94%	72.74%
7	Interest on Loan	171.5	85.89	1.32%	-49.92%
8	Interest on Security Deposit		45.10	0.69%	
9	Interest on Working Capital		67.12	1.03%	-
10	Less: Interest Capitalised	17.58	13.53	0.21%	-23.04%
11	Less: Emp Cost Capitalised	25.67	20.09	0.31%	-21.74%
12	Return on Equity incld. Tax on RoE	57.59	180.98	2.78%	214.26%
13	Carrying Cost on regulatory assets/liabilities		0.59	0.01%	
14	Total Dist Cost	6,870.43	6,509.56	100.00%	-5.25%
15	Less: Misc. Receipts	400.33	386.02		-3.57%
16	Special Appropriation	-277.38	-371.12		33.79%
17	Total ARR Requirement	6,192.72	5,752.42		-7.11%
19	Total Revenue (at Existing Rate)	6,251.99	5,751.16		-8.01%
20	GAP at Existing tariff (+/-)	59.27	-1.26		

Employee Expenses (in Rs. Cr.)

FY	Proposed	Approved	Actual	% Deviation w.r.t Approved Values
2016-17	294.86	228.69	306.45	34.0%
2017-18	399.72	274.19	353.27	28.8%
2018-19	396.99	274.83	410.76	49.5%
2019-20	393.24	358.8	525.21	46.4%
2020-21	432.27	361.02	476.67	32.0%
2021-22	523.86	409.49	489.32	19.5%
2022-23	650.24	474.83	459.17	-3.3%
2023-24	640.64	580.57	560.43*	-3.5%
2024-25	606.50**			

Particular	Actual Cost for FY22-23	Current Year Estimates (FY 2023-24)	% Inc/Dec w.r.t for FY22-23	Ensuing Year FY 2024-25 (Projected)	% Inc/Dec w.r.t FY23-24
Salaries & Others	232.76	286.93	23%	321.94	12%
Additional Employee Cost	38.68	42.43	10%	43.71	3%
Other Staff Cost	52.83	82.38	56%	84.85	3%
Terminal Benefits & Staff Welfare Exp.	150.13	170.96	14%	176.09	3%
Less: Employee Cost Capitalized	15.23	22.27	46%	20.09	-10%
Net Employee Costs	459.17	560.43	11%	606.49	8%

*Estimates for FY23-24

**Projected for FY24-25

- Projections for FY24-25 is on the higher side (8%) over FY23-24 estimates.
- Estimated expensed for FY23-24 is higher than last years actuals by 11%.
- For current financial year i.e. FY23-24, the Estimated Employee Expenses is lower by 3.3% than Commission's approved employee expenses. However, projections for FY24-25 is higher

than approved figures for FY23-24 by Rs. 46 Cr.(or 8%). **This needs to be reviewed.**

○ **Similarly, Higher Projected Employee Expenses for FY24-25 also needs to be reviewed as implementation of IT enabled solution, electronic payment systems results in reduction of Manpower requirement subsequent reduction in employee cost.**

Administrative and General Expenses (Rs. Cr.)

FY (Rs.Cr)	Proposed	Approved	Actual
2016-17	70.1	66.63	19.37
2017-18	84.66	57.81	48.69
2018-19	103.04	48.14	50.78
2019-20	97.94	50.13	50.06
2020-21	88.75	52.8	143.74
2021-22	83.38	63.66	113.26
2022-23	151.77	110.39	146.45
2023-24	262.16	158.12	191.09
2024-25	245.87		

- For FY22-23, Actual A&G Expenses is more than approved by Commission by Rs. 36 Cr (32%).
- However, For FY23-24, Estimated A&G Expenses are more than approved by Rs.32 Cr (or 21%) and more than Rs. 44Cr when compared with last years actuals.
- Accordingly, Proposed A&G Expenses seems to be on the higher side.
- **A&G Expenses for FY24-25 needs to be Reviewed.**

Particulars	Actuals for FY22-23	Estimate for FY23-24	Projected for FY24-25	Projected Increase in Expenses w.r.t FY23-24	% Increase
Property Related Expenses	12.91	16.69	17.86	1.17	7%
Communication Expenses	2.42	2.64	2.82	0.18	7%
Professional charges	60.43	66.84	71.52	4.68	7%
Conveyance and Travel	7.86	12.40	13.27	0.87	7%
Other Expenses	58.32	88.24	94.42	6.18	7%
Material Related Expense	4.52	4.28	4.58	0.30	7%
Additional Expenses proposed in FY24-25			41.40		
Total A&G Expenses	141.94	186.81	245.87	59.06	32%

Repair and Maintenance Costs (In Rs. Cr.)

FY	Proposed	Approved	Actual / Estimated
2017-18	88.53	68.48	18.4
2018-19	92.41	64.28	17.36
2019-20	99.383	86.33	12.57
2020-21	101.86	92.24	20.66
2021-22	109.53	109.22	137.05
2022-23	278.52	156.03	238
2023-24	346.01	281.99	281.99
2024-25	337		

- Licensee has submitted 116 Cr towards R&M for H-1 & 165 Cr for H-2 of FY24. Details needs to be reviewed for higher R&M estimate.
- Proposed R&M cost for FY 2024-25 is significantly higher than approved R&M expenses for FY23-24 by Rs. 55 Cr. This high estimate needs to be reviewed.

Debtors Outstanding as on 31.03.2023

Categories of Consumer/Region	0 – 6m	6– 12 m	>12 Months	>24 Months	Total Outstanding	Sales	No. of Days Sales	Dispute Amount	Disconnected
Kutir Jyoti	2.06	1.38	19.38	-	22.81	286.03	29.11	-	4,488.08
Domestic	235.27	150.15	1,886.96	-	2,272.38	75,117.21	11.04	8.54	1,26,553.36
General purpose <100 kw	8.94	11.41	77.21	-	97.56	31,564.98	1.13	0.37	18,558.96
Irrigation Pumping and Agriculture	27.29	20.88	196.89	-	245.07	4,592.85	19.48	-	7,396.82
Allied Agricultural Activities	0.14	0.07	0.27	-	0.48	229.34	0.77	-	12.85
Allied Agro-Industrial Activities	0.03	-0.01	0.23	-	0.25	433.61	0.21	-	33.47
Street lighting	7.84	7.62	24.58	-	40.04	3,160.41	4.62	-	558.86
LT Industrial (S) Supply	0.36	0.25	0.65	-	1.26	1,422.80	0.32	-	1,274.01
LT Industrial (M) Supply	1.09	0.35	1.19	-	2.63	4,649.80	0.21	-	648.66
Public Water Works & Sewrage Pumping	2.37	1.25	4.09	-	7.71	3,485.49	0.81	3.42	228.99
PWWS < 100kw	0.98	2.69	15.44	-	19.11	4,458.34	1.56	0.08	640.01
Bulk supply-domestic	0.11	0.01	0.15	-	0.27	876.05	0.11	-	188.18
Irrigation (Mega Lift)	0.18	0.08	0.55	-	0.81	2,221.32	0.13	-	16.82
Specified Public Purpose	1.76	0.82	2.77	-	5.36	2,547.62	0.77	0.19	929.83
General Purpose	1.00	0.40	3.16	-	4.57	11,455.01	0.15	0.04	144.30

Observation of Other Components

○ Depreciation

- **Licensee has proposed Rs. 125.98 Cr towards Depreciation for FY 2024-25 compared to the previous year approval of Rs. 97.06 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 Govt. Hon'ble Commission may undertake prudence check before allowing the costs. As regards the assets to be added by TPNODL 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

- 1. Continuity of digital rebate to 4% for LT Domestic, LT GP single phase & Single-phase irrigation consumers**
- 2. Continuity of Discount to Domestic Rural Consumers**

- Continuity of digital rebate to 4% for LT Domestic, LT GP single and Single-phase irrigation consumers
- Continuity of special rebate for Rural LT domestic consumers if consumption is through correct meter

Submission:

- Discom submission may be considered.

Charges for Temporary Supply

Licensee is of the view that more clarity is required to be provided in Supply Code for ease of doing business. Non the less for construction purposes, GP tariff may be made applicable for all types of construction irrespective of future tariff category upon completion of construction activity

Submission:

- As per Supply Code – 2019, temporary supply has been defined including construction purposes. Energy charges would be 10% higher than regular connection for the category.
- Discom demanded GP tariff for all construction, without considering consumer category.
- Practical difficulty, if any, may be looked into by the Hon'ble Commission.

Tariff Rationalization Measures

Continuity with special tariff for industries having CGP with CD up to 20 MW

- Discom requested that condition of GRIDCO's prior permission may be removed as the scheme is purely within the approved SMD of Discom.

Submission:

- Prior permission from GRIDCO is required to maintain the grid system.
- Hence, the Hon'ble Commission decided to involve GRIDCO.

1. Continuity of Special tariff to steel industries without CGP

2. Special tariff for industries those who have closed their units if reopen/starts

- TPWODL proposed continuation of special tariff to steel industries.
- Creation of Special Tariff for industries those who have closed their units if reopen/starts with minimum CD of 500 kW; incentive @20% on entire units if LF achieves 60%

Submission:

- Considering the present arrangement regarding steel industries, the same may be continued.
- Discom suggestion may be looked into by Hon'ble Commission

Tariff Rationalization Measures

Meter Cost to be recovered in CAPEX 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 Smart Metering is to be done in different Phases within the operational area of the Discom starting with three phase meter.
- 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.

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 with suitable changes in Supply Code/issue of Practice direction in the matter.

Tariff Rationalization Measures

Minimum off-take for the industries having CGP

- Discom proposed that Industry having CGP has to offtake minimum 25% of the requirement commensurate with their CD or demand charges has to be installed capacity instead of CD.

Submission:

- Demand charges on the installed capacity is not acceptable.

Combined application for replacing Form-I & Form-II

- Consumer are confused about the application form to choose. TPWODL proposed single application, which requires amendment of Regulation

Submission:

Form I is for domestic and GP and Form II is for all other.
For single application, amendment in Regulation is required.

Mega lift points under EHT with demand charges

- Separate category under EHT with demand charges of Rs 250 per kVA and energy charges. Waiver of demand charges is discrimination.

Submission:

It was already decided by the Hon'ble Commission to treat them as GP and shall not pay demand charges.

Tariff Rationalization Measures

Billing with Defective Meter

- Suitable practice direction may kindly be given in the RST order FY 24-25 for revision of the provisional bill in case of defective meter considering the past corresponding period's actual consumption with adjustment as per actual consumption of six months

Submission:

- Considering the present arrangement as per Supply Code provisions, suitable decision may be taken by Hon'ble Commission before issue of Practice Direction in the matter.
- Discom suggested to modify the provisional billing method.
- Whether Code has to be amendment instead of practice direction?

Assessment in case of theft of energy

- Hon'ble Commission has provided guidelines; however, as per field condition while doing the assessment it is not practically feasible to adhere the provision.
- For assessment, LF may be: Domestic – 30%, GP – 60%, continuous process industry – 100%

Submission:

- Considering the present arrangement as per Supply Code provisions, the need for change in LF is not desirable.
- Supply code amendment is required, not under present proceeding.

Revision of reconnection charges, and processing fee for services

- Doubling of reconnection charges;
- Introduction of application processing fees for change in name, address change, change in category etc

Submission:

- The fees proposed should be reviewed based on actual cost involved. Detailed submission are required.



Thank You

WORLD INSTITUTE OF SUSTAINABLE ENERGY (WISE) PUNE

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