

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

**02 FEBRUARY 2024** 

BY

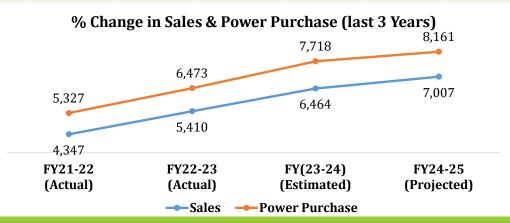
WORLD INSTITUTE OF SUSTAINABLE ENERGY
(CONSUMER COUNSEL)

PUNE

**Demand Forecasting** 

Demand Polecasting												
		Sales (MU)							Consumers (Nos.)			
	FY 2022-23	FY 2023-24			FY 2024-25						%	
Category	Actual	Proposed	Approved	Estimated	Projected	approved of	Projected % over estimates of FY23-24		As on 1st April 2023	April 2024	growth	
LT	2,133	2,608	2,649	2,484	2,679	1%	8%	20,88,432	20,40,888	19,93,549	-2.32%	
HT	625	686	686	666	773	13%	16%	614	659	818	24.13%	
EHT	2,652	2,953	2,953	3,315	3,555	20%	7%	37	41	42	2.44%	
Total	5,410	6,247	6,288	6,464	7,007	11%	8%	20,89,083	20,41,588	19,94,409	-2.31%	
LT sale % of Total	39.42%	41.75%	42.13%	38.42%	38.23%							
Power Purchase (MU)	6,473	7,459	7,508	7,718	8,161	9%	6%					

- In HT, Consumer Nos. are increasing from 659 (FY23-24) to 818 (FY24-25) i.e. addition of 159 HT consumers but sales projection is 16% higher in FY24-25 i.e., by 107 MU compared to revised estimates of FY23-24.
- LT sales projected to increase from 2484 MU (FY23-24) to 2679 MU (FY24-25). i.e. 8% increase. However, LT consumer growth is projected to reduce by 2.32% in FY24-25.
- Higher LT-Sales projections leads higher need of cross subsidy and thereby impacts tariff adversely.



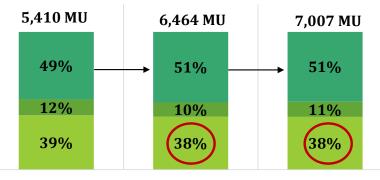
### **Electricity Consumption Pattern Across Different Categories**



	FY22-23	FY23-24	FY24-25
Particulars	(Actual)	(Estd.)	(Proj.)
LT consumers	20,88,432	20,40,888	19,93,549
LT consumption (MU)	2,133	2,484	2,679
Per consumer use per month kWh	85	101	112
HT consumers	614	659	818
HT consumption (MU)	625	666	773
Per consumer use per month kWh	84,883	84,164	78,754
EHT consumers	37	41	42
EHT consumption (MU)	2,652	3,315	3,555
Per consumer use per month kWh	59,72,818	67,36,923	70,54,127
Total consumption	5,410	6,464	7,007

#### **CONSUMPTION SHARE**





- FY22-23 (ACTUAL)
- FY23-24 (ESTD.)
- FY24-25 (PROJ.)

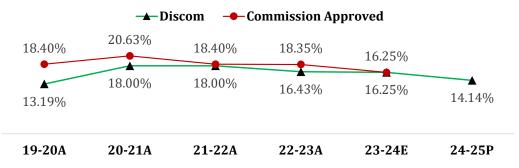
- EHT Sales is projected on the Higher Side with >50% Sales majorly due to increase in Sales of Heavy Industries.
- LT consumers consumption is estimated to reduce from 39% of the total sales in FY 22-23 to 38% of total sales in FY24-25

Category	Supply Voltage	FY22-23 (Actual)	FY23-24 (Estd.)	% Increase over FY22-23	FY24-25 (Proj.)	% Increase over FY23-24
Irrigation Pumping and Agriculture	LT	84.52	86.04	2%	133.53	55%
Allied Agricultural Activities	LT	38.57	60.43	57%	81.51	35%
Allied Agro-Industrial Activities	LT	0.97	1.73	79%	2.07	19%
Irrigation Pumping and Agriculture	НТ	0.82	4.53	449%	6.22	37%
Allied Agricultural Activities	НТ	17.38	21.72	25%	24.32	12%
Allied Agro-Industrial Activities	НТ	31.82	42.41	33%	47.62	12%
Large Industry	EHT	1758.42	2246.23	28%	2417.23	8%
Heavy Industry	<b>EHT</b>	<b>139.80</b>	<b>374.17</b>	<b>168%</b>	<mark>434.55</mark>	<mark>16%</mark>
Power Intensive Industry	ЕНТ	203.45	131.21	-36%	133.03	1%

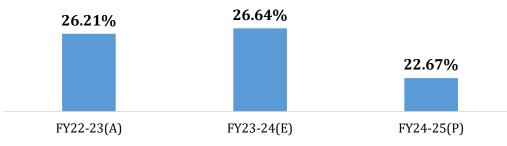
### **Overall Losses (Key Performance Parameters)**



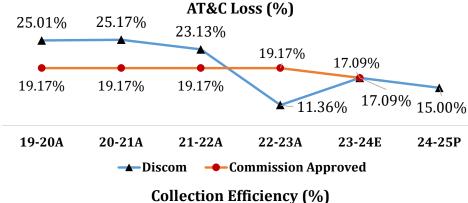


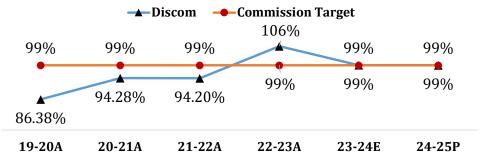


#### LT Loss Loss in the System with 8% loss at HT and 0% loss at EHT levels



- o AT&C and Distribution loss have decreasing trend though approval is constant. Actual performance may be reviewed o with targets given in vesting order.
- The HT loss of 8% 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 26% (FY 22-23 actual) and 26.64% (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%.

### **Growth of BPL (Kutir Jyoti) Consumers**



<b>Y</b> ear	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	75673	-36.31%	5.94	-78.33%	6.54
2023-24	42329	-44.06%	5.06	-14.74%	9.96
2024-25	16877	-60.13%	5.47	8.06%	27.00

Year	LT Consumers	Kutir Jyoti	% Kutir Jyoti in Total LT	LT Consumption (MU)	Kutir Jyoti Consumptio n (MU)	% Consumption in Total LT
2022 23	20,88,432	75,673	3.62%	2,132.70	5.935	0.28%
2023 24	20,40,888	42,329	2.07%	2,483.58	5.06	0.20%
2024 25	19,93,549	16,877	0.85%	2,678.78	5.468	0.20%

- Large number of BPL consumers are being proposed to be shifted to other Domestic Category since FY22-23. **Projections for FY 24-25 need to be reviewed by licensee.**
- 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.

#### **Avg. Monthly Consumption (Units)**



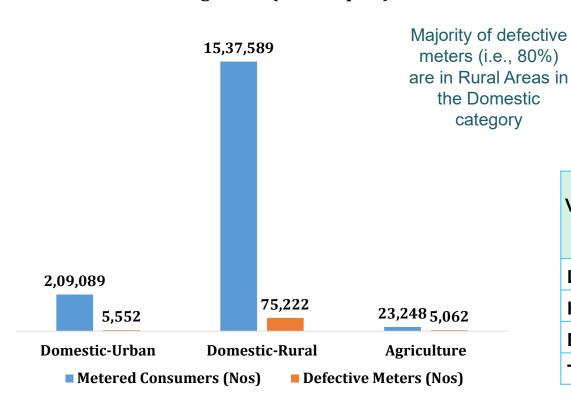
2018-19 2019-20 2020-21 2021-22 2022-23 2023-24 2024-25 (E) (P)

**→**Avg. Monthly Consumption (Units)

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



#### Metering Status (as on Sep'23)



Voltage level Wise	Metered Consumers (Nos)	Defective Meters (Nos)	% Defective Meters
LT	19,35,737	94,603	4.9%
НТ	713	0	0.0%
EHT	41	0	0.0%
Total	19,36,491	94,603	4.9%

Capex (as per Order dated 12.12.2023 in Case 103/2023)

Particulars	Approved for FY2021-22	Approved for FY2022-23	Approved for FY2023-24	Proposed for FY2024-25	Approved for FY2024-25
Safety & Statutory	28.45	9.35	49.41	47.08	37.98
Loss reduction	16.39	12.53	56.61	55.27	55.27
Reliability	94.35	60.18	103.15	117.15	101.13
Load Growth	21.71	92.88	102.14	161.65	117.48
Technology /Infrastructure	97.88	97.81	119.80	36.57	36.57
Disaster Mitigation/Reducing Carbon Footprint/Others	-	53.79	1.99	29.58	29.10
Total	258.78	326.54	433.10	447.30	377.53



2024-25

2023-24

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. 103/2023. This approved cost shall be passed in the ARR as per the norms.

2021-22

2022-23

0.00

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

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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	2,696.53	2,930.99	67.05%	8.69%
2	Employee Cost	512.79	532.72	12.19%	3.89%
3	Repair & Maintenance Cost	214.34	321.45	7.35%	49.97%
4	Administrative & General Expenses	120.13	134.40	3.07%	11.87%
5	Bad & Doubtful Debt including Rebate	35.59	40.49	0.93%	13.77%
6	Depreciation	49.83	97.29	2.23%	95.25%
7	Interest on Loan	21.61	113.81	2.60%	426.65%
8	Interest on Security Deposit	51.83	63.17	1.45%	21.88%
9	Interest on Working Capital	27.02		0.00%	-100.00%
10	Financing Cost	-		0.00%	-
11	Less: Interest Capitalised		-	-	-
12	Less: Emp Cost Capitalised	-	-	-	-
13	Return on Equity incld. Tax on RoE	47.19	137.02	3.13%	190.37%
14	Total Dist Cost	3,776.86	4,371.33	100.00%	15.74%
15	Less: NTI	154.99	207.34		33.78%
16	Special Appropriation	-	-		-
17	Carrying Cost @7.45%	-65.59	9.24		-114.09%
18	Total ARR Requirement	3,556.28	4,173.23		17.35%
19	Total Revenue (at Existing Rate)	3,559.02	4,048.92		13.76%
20	GAP at Existing tariff (+/-)	2.74	-124.32		

Employee Expenses (in Rs. Cr.) TPNODL

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FY	Proposed	Approved	Actual	% Deviation w.r.t Approved Values
2016-17	288.49	216.12	316.17	46.3%
2017-18	392.24	230.69	354.69	53.8%
2018-19	401.07	256.14	364.62	42.4%
2019-20	373.12	327.13	401.94	22.9%
2020-21	392.51	348.84	285.41	-18.2%
2021-22	362.63	357.24	486.56	36.2%
2022-23	432.87	417.8	440.32	5.4%
2023-24	560.63	512.79	488.35*	-4.8%
2024-25	532.72**			

<sup>\*</sup>Estimates for FY23-24 \*\*Projected for FY24-25

- Projections and estimates for Employee Cost for New Recruitment oneeds to be reviewed. (almost 30% increase in costs observed)
- For current financial year i.e. FY23-24, the Estimated Employee Expenses is lower by 4.8% than Commission's approved employee

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 (inherited + new)	241.58	277.94	15%	313.05	30%
Outsourced Employee Cost	51.30	58.89	15%	62.96	23%
Additional Employee Cost - CTC	4.97	5.80	17%	5.34	7%
Total Other Staff Cost	155.32	160.49	3%	168.37	8%
Less: Employee Cost Capitalized	12.85	14.78	15%	16.99	32%
Net Employee Costs	440.32	488.35	11%	532.72	21%

expenses. However, projections for FY24-25 is higher than approved figures for FY23-24 by Rs. 20 Cr.(or 4%). **This needs to be reviewed**.

Similarly, Higher Projected Employee Expenses for new recruitment 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.

The licensee is outsourcing many activities and also incurring costs on meter reading, billing and collection etc

### **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	3011	3017	3107	0%	3%
No. of Million Units Sold	5410	6464	7007	19%	8%
No. of Employees per MU sold	0.56	0.47	0.44	-16%	-5%
No. of consumers	2089083	2041588	1994409	-2%	-2%
No. of employees per 1000 consumers	1.44	1.48	1.56	3%	5%

### Administrative and General Expenses (Rs. Cr.)



FY (Rs.Cr)	Proposed	Approved	Actual
2016-17	53	40.31	43.41
2017-18	75.37	46.77	45.31
2018-19	44.89	41.33	42.46
2019-20	58.85	37.5	53.6
2020-21	50.1	39.29	95.58
2021-22	63.45	49.2	105.23
2022-23	240.01	141.43	112.55
2023-24	257.19	120.13	123.13
2024-25	134.40		

- For FY22-23, Actual A&G Expenses is less than approved by Commission by Rs. 28.8 Cr (20%).
- However, For FY23-24, Estimated A&G Expenses are more than approved by Rs.2 Cr and more than Rs. 10Cr 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	7.36	9.07	11.02	1.95	21%
Communication Expenses	3.06	3.28	3.35	0.07	2%
Professional charges	10.17	10.69	11.60	0.91	8%
Conveyance and Travel	14.62	15.00	16.08	1.08	7%
Other Expenses	77.34	85.09	92.35	7.26	9%
Total A&G Expenses	112.55	123.13	134.40	11.27	9%

o It is observed that, under Other Expenses – Metering, Billing and Collection Expense has increased considerably, followed by Ads and Media Campaign. Around Rs. 1.05 Cr increase (or 97%) is observed in Misc. Expenses. Same needs to be reviewed in detail.

### Repair and Maintenance Costs (In Rs. Cr.)



FY	Proposed	Approved	Actual / Estimated	
2016-17	73.3	70.54	18.61	
2017-18	88.53	87.97	13.77	
2018-19	89.79	84.92	17.02	
2019-20	99.11	89.48	15.66	
2020-21	138.96	95.09	19.67	
2021-22	106.48	114.23	117.65	
2022-23	240.01	141.43	238	
2023-24	257.19	214.34	257.11	
2024-25	321			

- Discom has computed R&M on Own Asset @4.5% of Opening GFA instead of 4% as per MYT Regulations.
- Licensee has submitted 134.33 Cr towards R&M for H-1 & 122.77 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. 107 Cr. This high estimate needs to be reviewed.

Sl.No.	Particulars	Previous Year (FY23) Actual	FY 23-24 H-1 Actual			Projected (FY-24-25)	
	Total	238	134.33	122.77	257.11	321.44	

### Debtors Outstanding as on 31.03.2023



Categories of Consumer/Region	0 – 6m	6- 12 m	12-24 m	24-36 m	Over 36 m	Total Out- standing	Billed	No. of Days of Sales	Outstanding as %age of Billed
Agro & Agro Allied	0.15	0.24	0.35	-	-	0.75	5.27	52	14%
Domestic	159.01	70.68	44.38	-	-	274.07	665.26	150	41%
LT General(Commercial)	-0.77	0.32	0.96	-	-	0.51	383.22	0	0%
Industrial	2.29	1.23	1.45	-	-	4.97	118.87	15	4%
High tension	11.05	12.99	11.94	-	-	35.97	1,547.17	8	2%
Public Lighting(Street Lighting)	0.90	1.08	1.46	-	-	3.44	16.04	78	21%
Irrigation/ Agricultural	6.25	6.49	11.47	-	-	24.21	39.84	222	61%
Water Supply & public works	1.43	2.41	5.64	-	-	9.49	58.16	60	16%
Bulk supply to others	-0.00	0.13	0.03	-	-	0.16	9.83	6	2%
Others	-6.88	2.29	1.41	-	-	-3.17	40.30	-29	-8%
TOTAL	173.42	97.87	79.12	-	-	350.40	3,198.81	40	11%

- Licensee need to submit the updated data of debtors outstanding.
- Licensee to maintain the TD/PD disconnection register along with recovery of disconnection and connection charges collected.
- SMS service to consumers intimating generation of bill with amount, due date for prompt payment with rebate, date for late fee etc. to be ensured for improvement in collecting efficiency.
- Consumers from Domestic, Irrigation and AG, Water Supply and Public Works, Public Lighting etc. needs to be targeted for speedy recovery of bills.

### **Observation of Other Components**



#### Depreciation

- Licensee has proposed Rs. 97.29 Cr towards Depreciation for FY 2024-25 compared to the previous year approval
  of Rs. 49.83 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.



#### **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

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



#### 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 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.

#### **Encouragement towards Ebill**

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

- 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.



#### **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

#### **Billing of Public Lighting**

TPNODL 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.

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



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

- Continuity of digital rebate to 4% for LT Domestic, LT GP single phase & may be extended to Single-phase irrigation consumers
- Continuity of special rebate for Rural LT domestic consumers @ 5 paise per unit in addition to existing prompt payment rebate who draw their power through correct meter and pay the bill in time

#### **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

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



#### Continuity in Levy of CSS on RE power

• To promote RE generation in the state of Odisha, applicability of CSS & Wheeling charges on RE power availed through open access from other source (other than Odisha) is in force. Same be continued.

#### **Submission:**

- Hon'ble Commission in RST Order for FY23-24 has allowed levy of 100% Cross Subsidy Surcharge (CSS) is payable by the consumers availing Renewable power through open access. (para 95, page 94).
- However, more clarity needs to be provided in line with MoP Electricity (Promoting Renewable Energy Through Green Energy Open Access) Rules, 2022 notified on 6<sup>th</sup> June 2022 regarding applicability and exemptions.
- Hon'ble Commission may amend existing Open Access Regulations to incorporate Green Energy Open Access.

#### 1. Continuity of Special tariff to steel industries

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

- TPNODL has submitted that for the FY 2023-24, the applicable charges have been increased to Rs.5.00 per KVAh from earlier Rs. 4.30 per kVAh. Thus less consumers are availing the benefit resulting in lower actual drawl. Licensee has proposed that the scheme may kindly be approved for ensuing year with reduced rate of Rs 4.30per KVAh as was approved in RST Order for FY 22-23.
- Creation of Special Tariff for industries those who have closed their units if reopen/starts

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



#### Continuation Green Tariff Premium (GTP) mechanism with reduced rate of 20 p/u.

• Licensee submitted that with reduction in price of RE power in the market RE certification charges also reduced. Previously, industries were avoiding RE certificate and opting GTP mechanism from DISCOM, because it was competitive. Therefore, the DISCOM suggest the GTP may be fixed at 20 paise for the ensuing year, which will be winwin for all the stake holders.

#### **Submission:**

- Hon'ble Commission in RST Order for FY23-24 has allowed levy of 125 p/u over and above the normal rate of energy charges. (Page 140).
- Discom suggestion may be looked into by Hon'ble Commission

#### **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

- 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 suggestion may be looked into by Hon'ble Commission



### Thank You

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