



# AISSMS

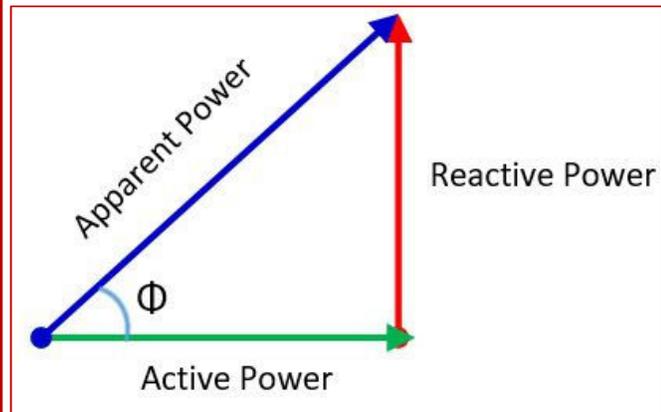
INSTITUTE OF INFORMATION TECHNOLOGY

ADDING VALUE TO ENGINEERING



Department of Electrical Engineering

Power Quality & Energy Conservation Cell



## Summary of MSEDCL New Tariff from 1 Apr 2020 (KVAH billing)

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## SALIENT FEATURES OF MSEDCL TARIFF 1 APR 2020

### ⚡ **kVAh based billing**

- For **HT Consumers** shall be **effective from 1 April, 2020**.
  - Reduction in unit rate\* (e.g. For HT Industrial **Rs. 8.52/- per kWh to Rs. 7.59/- per kVAh**)

*\* Rate = Energy Charge + FAC + Wheeling Charge*

- For **LT Consumers** (Above 20 kW) is **proposed from 1 April, 2023**.

### ⚡ **Harmonics**

- **No Harmonics penalty** in FY 2020-21.
- All **Bulk Consumers** with Contract Demand **above 20 MVA** shall **install power quality meter by March 2021** (and above **10 MVA by March 2022**) and share monthly data with Distribution Licensee.
- Also, **Distribution Licensee needs to install power quality meter** at their selected substations and **share the data** from these meter **on its website**.
- **MSEDCL** needs to **arrange a program for creating awareness** amongst the consumers about **effects of Harmonics on the power equipment**.

### ⚡ **Fixed / Demand Charges**

- **Increase** in monthly charges (e.g. For **HT Industrial** from **Rs. 391/- per kVA to Rs. 411/- per kVA**)
- **Increase** in monthly charges (e.g. For **LT Industrial** Above 20 kW from **Rs. 294/- to Rs. 303/-**)

⚡ Fuel Cost Adjustment (**FCA**) is **merged into Energy Charge**.

⚡ **MSEDCL to display PF** (computed by considering leading and lagging RkVAh) recorded during the month **in the bill**.

- ✦ In case of **HT** category, **minimum billing demand is increased by 5% (i.e. 55% of the Contract Demand)**. **No change** for **LT** Category.
- ✦ **MD** will be recorded with **30 min fixed window** method (as earlier).
- ✦ Introduced **Incremental Consumption Rebate** (Applicable for HT Consumers) **of Rs 0.75/kVAh**.
- ✦ Introduced **Bulk Supply Discount** at rate of **1-2% on energy charge** including FAC (Applicable to **HT-Industrial** consumers with consumption **> of 1 lakh units per month**)
- ✦ **Tax** on Sale of Electricity and Electricity duty **shall be based on kWh** which is converted from kVAh using recorded PF.
- ✦ **Independent R&D** Unit **moved from commercial to industrial** category.
- ✦ **Load factor incentive** will be calculated using **actual interruption hours**.
- ✦ **MSEDCL not to levy any Grid Support Charge** to the **solar roof top** installations.
- ✦ **No changes** in existing structure of **ToD slots** and applicable **charges**.

## MERGING OF CATEGORIES

Existing Category	Proposed Category
HT VIII(B) - Temporary Supply (others)	HT – Commercial
LT V - Advertisement and Hoardings	LT - Non-Residential or Commercial
LT VII - Temporary Supply (Religious)	LT – Residential
LT VII - Temporary Supply (Others)	LT - Non-Residential or Commercial
LT VIII - Crematoriums and Burial Grounds	LT – Residential
HT VIII (A) HT – Temporary Supply Religious	LT – Residential
LT-V(A) – Power Loom and LT-V(B) - Industry (General)	LT-Industry

## SUMMARY OF LT TARIFF FY 2020-21 APPLICABLE FROM 1 APR 2020

Category	Units	FY 2020-21		
		Fixed/Demand Charge	Energy Charge	Wheeling Charge
<b>LT Residential</b>				
LT I(A): LT - Residential-BPL	Rs/conn/mth	26.00	1.12	-
<i>LT I(B): LT - Residential</i>				
1-100 units	Rs/conn/mth	100.00	3.46	1.45
101-300 units	Rs/conn/mth	100.00	7.43	1.45
301-500 units	Rs/conn/mth	100.00	10.32	1.45
Above 500 units	Rs/conn/mth	100.00	11.71	1.45
Three Phase Charges	Rs/conn/mth	340.00	-	-
<b>LT II: LT - Non-Residential</b>				
(A) 0 – 20 kW	Rs/conn/mth	403.00	7.36	1.45
(B): >20 kW and ≤ 50 kW	Rs/kW/mth	403.00	10.72	1.45
(C): >50 kW	Rs/kW/mth	403.00	12.83	1.45
<b>LT III: LT - Public Water Works (PWW)</b>				
(A): 0-20 kW	Rs/kW/mth	100.00	2.40	1.45
(B): >20 kW and ≤ 40 kW	Rs/kW/mth	121.00	3.78	1.45
(C): >40 kW	Rs/kW/mth	150.00	5.11	1.45
<b>LT IV: LT - Agriculture</b>				
<b>LT IV(A): LT - AG Un-metered - Pumpsets</b>				
<i>Category 1 Zones</i>				
(a) 0-5 HP	Rs/HP/mth	334.00	-	145
(b) Above 5 HP - 7.5 HP	Rs/HP/mth	360.00	-	145
(c) Above 7.5 HP	Rs/HP/mth	405.00	-	145
<i>Category 2 Zones</i>				
(a) 0-5 HP	Rs/HP/mth	258.00	-	145
(b) Above 5 HP - 7.5 HP	Rs/HP/mth	282.00	-	145
(c) Above 7.5 HP	Rs/HP/mth	327.00	-	145
LT IV(B): LT - Agriculture Metered Tariff - Pumpsets	Rs/HP/mth	41.00	1.85	1.45
LT IV(C): LT - Agriculture Metered – Others	Rs/HP/mth	111.00	3.34	1.45
<b>LT V: LT – Industry*</b>				
(i): 0-20 kW	Rs/conn/mth	454.00	5.21	1.45
(ii): Above 20 kW	Rs/kW/mth	303.00	6.11	1.45
<b>LT VI: LT - Street Light</b>				
(A): Grampanchayat; A B & C Class Municipal Council	Rs/kW/mth	111.00	4.90	1.45
(B): Municipal corporation Area	Rs/kW/mth	111.00	5.97	1.45
<b>LT VII (A) - Public Services – Govt.</b>				
(i): ≤ 20 kW	Rs/conn/mth	333.00	3.31	1.45
(ii): >20 - ≤ 50 kW	Rs/kW/mth	333.00	4.89	1.45
iii): >50 kW	Rs/kW/mth	333.00	6.01	1.45
<b>LT VII (B) - Public Services - Others</b>				
(i): ≤ 20 kW	Rs/conn/mth	362.00	4.86	1.45
(ii): >20 - ≤ 50 kW	Rs/kW/mth	362.00	7.44	1.45
iii): >50 kW	Rs/kW/mth	362.00	7.84	1.45
LT VIII – Electric Vehicle Charging Station	Rs/kW/mth	70.00	4.05	1.45

## SUMMARY OF HT TARIFF FY 2020-21 APPLICABLE FROM 1 APR 2020

Category	Units	FY 2020-21		
		Fixed/Demand Charge	Energy Charge	Wheeling Charge
<b>EHV</b>				
HT I (A) HT - Industry	Rs/kVA/mth	411.00	7.02	-
HT I (B): HT - Industry (Seasonal)	Rs/kVA/mth	411.00	7.28	-
HT II: HT – Commercial	Rs/kVA/mth	411.00	11.47	-
HT III : HT - Railways/Metro/Monorail Traction	Rs/kVA/mth	411.00	6.76	-
HT IV: HT - Public Water Works	Rs/kVA/mth	411.00	6.07	-
HT V(A): HT - Agriculture Pumpsets	Rs/kVA/mth	72.00	3.79	-
HT V(B): HT - Agriculture - Others	Rs/kVA/mth	72.00	5.20	-
HT VI: HT - Group Housing Societies (Residential)	Rs/kVA/mth	329.00	5.70	-
HT VIII(A): HT - Public Services-Gov.	Rs/kVA/mth	411.00	7.74	-
HT VIII(B): HT - Public Services-Others	Rs/kVA/mth	411.00	9.48	-
HT IX: HT – Electric Vehicle Charging Station	Rs/kVA/mth	70.00	4.93	-
<b>HT</b>				
HT I (A) HT - Industry Sub-total	Rs/kVA/mth	411.00	7.02	0.57
HT I (B): HT - Industry (Seasonal)	Rs/kVA/mth	411.00	7.28	0.57
HT II: HT – Commercial	Rs/kVA/mth	411.00	11.47	0.57
HT III : HT - Railways/Metro/Monorail Traction	Rs/kVA/mth	411.00	6.76	0.57
HT IV: HT - Public Water Works	Rs/kVA/mth	411.00	6.07	0.57
HT V(A): HT - Agriculture Pumpsets	Rs/kVA/mth	72.00	3.79	0.57
HT V(B): HT - Agriculture - Others	Rs/kVA/mth	72.00	5.20	0.57
HT VI: HT - Group Housing Societies (Residential)	Rs/kVA/mth	329.00	5.70	0.57
HT VIII(A): HT - Public Services-Gov.	Rs/kVA/mth	411.00	7.74	0.57
HT VIII(B): HT - Public Services-Others	Rs/kVA/mth	411.00	9.48	0.57
HT IX: HT – Electric Vehicle Charging Station	Rs/kVA/mth	70.00	4.93	0.57

Ref: MERC Order – Case No. 322 of 2019 (<https://www.mahadiscom.in/consumer/wp-content/uploads/2020/03/Order-322-of-2019.pdf>)

- Harmonic analysis (LT/HT)
- Power Quality study
- Reactive Power (PF) Study
- Electricity bill analysis
- Study & Analysis (ETAP)

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