

# महाराष्ट्र विद्युत नियामक आयोग

## **Maharashtra Electricity Regulatory Commission**



Date: 27 December, 2024

Ref. No. MERC/FAC/2024-25/0830

The Chairman and Managing Director

Maharashtra State Electricity Distribution Company Ltd., 5<sup>th</sup> Floor, Prakashgad, Plot No. G-9 Bandra (East), Mumbai 400 051

Subject:

Prior Approval of Fuel Adjustment Charges (FAC) submission of MSEDCL for

the month of October, 2024.

Reference:

1. MSEDCL's FAC submission dated 19 November, 2024 for prior approval of

FAC for the month of October, 2024.

2. Data gaps communicated to MSEDCL vide email dated 25 November, 2024.

3. MSEDCL's response to data gaps by email dated 3 December, 2024 and 13

December, 2024.

Sir,

Upon vetting the FAC calculations for the month of October, 2024 as mentioned in the above reference, the Commission has accorded approval for FAC amount of Rs. 917.43 Crore. The said amount is added to the existing FAC Fund and accordingly total FAC Fund as on October, 2024 is Rs 1175.19 Crore. The FAC amount of Rs 629.87 Crore is to be levied up to December, 2024. To avoid any variation in tariff, the Commission has decided to continue the recovery of same amount of Rs 629.87 Crore and allow the recovery of FAC Fund existing as on October, 2024 to be recovered in January, 2025

Month	FAC Amount (Rs. Crore)
October, 2024	629.87

The FAC fund along with carrying cost up to October, 2024 is Rs 1175.19 Crore. Considering the allowed recovery of Rs 629.87 Crore, the balance amount of Rs 545.32 Crore is being carried forward to next FAC billing cycle. MSEDCL shall maintain the monthly account of FAC Fund and upload it on its website to maintain transparency of FAC Fund and also for information of all the stakeholders.

Yours faithfully,

(Dr. Rajendra G. Ambekar) Secretary, MERC

Encl: Annexure A: Detailed Vetting Report for the month of October, 2024.

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Detailed Vetting Report Date: 27 December, 2024

## PRIOR APPROVAL FOR FAC CHARGES FOR THE MONTH OF OCTOBER, 2024

Subject: Prior Approval of Fuel Adjustment Charges (FAC) submission of MSEDCL for

the month of October, 2024.

Reference: MSEDCL's FAC submission dated 19 November, 2024, 3 December, 2024 and

13 December, 2024 for prior approval of FAC for the month of October, 2024.

## 1. FAC submission by MSEDCL:

1.1 MSEDCL has submitted FAC submissions for the month of October, 2024 as referred above. Upon vetting the FAC calculations, taking cognizance of all the submissions furnished by MSEDCL against the data gaps issued, the Commission has accorded approval for FAC amount of Rs. 917.43 Crore. The said amount is added to the existing FAC Fund and accordingly total FAC Fund as on October, 2024 is Rs 1175.19 Crore. The FAC amount of Rs 629.87 Crore is to be levied up to December, 2024. To avoid any variation in tariff, the Commission has decided to continue the recovery of same amount of Rs 629.87 Crore and allow the recovery of FAC Fund existing as on October, 2024 to be recovered in January, 2025. Considering the allowed recovery of Rs 629.87 Crore, the balance amount of Rs 545.32 Crore is being carried forward to next FAC billing cycle.

#### 2. Background

- 2.1 On 31 March, 2023, the Commission has issued Tariff Order for MSEDCL, (Case No.322 of 2019) for True-up of FY 2019-20, FY 2020-21 and FY 2021-22, provisional Truing-up for FY 2022-23, and Aggregate Revenue Requirement and Revised Tariff for FY 2023-24 and FY 2024-25. Revised Tariff has been made applicable from 1 April, 2023.
- 2.2 In the Tariff Order, the Commission has stipulated methodology of levying FAC as follows:

"7.5.13 Therefore, using its powers for Removing Difficulty under Regulations 106 of the MYT Regulations, 2019, the Commission is making following changes in the FAC mechanism stipulated under Regulation 10 of MYT Regulations, 2019:

Distribution Licensee shall undertake computation of monthly FAC as per Regulation 10 of the MYT Regulations, 2019 except for treatment to be given to negative FAC as follows:

 Negative FAC amount shall be carried forward to the next FAC billing cycle with holding cost.

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- Such carried forward negative FAC shall be adjusted against FAC amount for the next month and balance negative amount shall be carried forward to subsequent month with holding cost.
- Such carry forward of negative FAC shall be continued till next tariff determination process.
- In case such FAC Fund is yet to be generated or such generated fund is not sufficient to adjust against FAC computed for given month, then Distribution Licensee can levy such amount to the consumers through FAC mechanism, upon seeking prior approval from the Commission.
- 7.5.14 In order to maintain transparency in management and use of such FAC Fund, the Distribution Licensee shall maintain monthly account of such FAC fund and upload it on its website for information of stakeholders.
- 7.5.15 As the Commission has continued concept of FAC fund as stated above to stabilise the increase in fuel prices and power purchase costs, the Commission has modified the FAC mechanism such that the Distribution Licensees shall submit the FAC computations on a monthly basis for prior approval, irrespective of whether FAC is chargeable in a month or whether some amount is accruing to the Fund on account of negative FAC.
- 8.5.14 The details of the FAC as per the Regulations, shall be submitted by the 15th of the every month prior to the month on which the FAC is proposed to be levied and the Commission will endeavour to decide on the same within 10 days so that the same can be levied from the 1st of the subsequent month."
- 2.3 Vide its letter dated 20 April, 2020, the Commission communicated the excel formats along with the checklist to file FAC submissions for prior approval to all Distribution Licensees. The Commission also directed all Distribution Licensees to file FAC submissions by 15<sup>th</sup> of every month prior to the month for which the FAC is proposed to be levied for prior approval.
- 2.4 Accordingly, MSEDCL has filed FAC submissions for the month of October, 2024 for prior approval. The Commission has scrutinized the submissions provided by MSEDCL and has also verified the fuel and power purchase bills provided along with its submissions.

#### 3. Energy Sales of the Licensee

3.1 The net energy sales within licence area as submitted by MSEDCL in the FAC submission and as approved by the Commission are as shown in the table below:



	Yearly Approved	Monthly	Actual Sales
Consumer Category	by the Commission (MU)	Approved (MU)	October, 2024 (MU)
HT Category			
Industry (General)	40,970.86	3,659.76	3,301.20
Industry (Seasonal)	171.63	11.16	5.31
Commercial	2,085.56	192.61	175.77
Railways/Metro/Monorail	115.31	10.28	14.13
Public Water Works (PWW)	2,248.88	188.59	187.75
Agricultural – Pump-sets	803.74	84.93	33.09
Agricultural – Others	278.19	23.86	22.87
Group Housing Society (Residential)	235.32	20.10	21,93
Public Services - Government	359.02	30.39	34.75
Public Services - Others	900.99	77.60	80.33
Electric Vehicle Charging Stations	63.69	6.58	11.16
MSPGCL Auxiliary	398.52	59.86	29.19
Sub-total (A)	48,631.73	4,365.72	3,917.48
LT Category			
BPL	64.73	5.59	3.06
Residential	27,688.73	2,347.53	2,212.95
Non-Residential	7,273.13	683.54	612.10
Public Water Works	967.36	78.64	81.99
AG Metered (Pump-sets)	18,813.96	1,417.72	1,651.82
AG Metered (Others)	259.21	21.89	16.99
Industrial	12,671.55	1,097.87	1,145.08
Street Lights	923.14	81.95	94.94
Public Services	789.73	67.73	79.36
Electric Vehicle Charging Stations	2.55	0.22	1.55
Sub-total (B)	69,454.09	5,802.68	5,899.84
Total - Metered (C = A+B)	1,18,085.82	10,168.40	9,817.32
Unmetered Sale (D)	8,719.33	689.25	900.96
Grand Total(C+D)	1,26,805.15	10,857.64	10,718.29

- 3.2 For the month of October, 2024, it is observed that actual sales of 10,718.29 MU is lower as compared to the approved energy sales of 10,857.64 MU.
- 3.3 MSEDCL has submitted the data providing actual billing and estimated billing undertaken for the calculation of total energy consumption for the month of October, 2024. As per the data, the billing of about 97.15% of sales is undertaken as per actual meter readings and balance 2.85% is assessed on an estimated basis. 100% of HT billing



- is undertaken on actual basis and estimation is only for LT category. The figures do not include the agriculture sales which is on estimated basis for the month of October, 2024.
- 3.4 The number of actual and estimated meter readings undertaken by MSEDCL for the month of October, 2024 except for agriculture consumers are as given below:

Sr. No.	Particulars	No. of Meters for which actual meter reading is done either manually or through AMR	No. of Meters for which meter reading are estimated.	Total Meters
1	НТ	23714	0	23714
2	LT	23981672	2610875	26592547
	Total	24005386	2610875	26616261

3.5 Further, comparison of sales for April to October for FY 2024-25 as compared to last year is as shown below:

Particulars	LT - Residential (MU)	LT Others (MU)	HT (MU)	Ag- Unmetered	Total (MU)	
Apr-23	2100	3614	4446	934	11093	
Apr-24	2397	3621	4000	892	10910	
May-23	2399	4356	4622	898	12275	
May-24	2706	3720	4118	904	11449	
June-23	2728	4281	4492	858	12359	
June-24	2881	3639	4067	869	11456	
July-23	2317	3180	4483	708	10688	
July-24	2390	3341	3925	749	10405	
August-23	2058	3249	4590	743	10640	
August-24	2152	3448	3895	824	10320	
September-23	2110	4061	4468	680	11319	
September-24	2222	3406	3772	788	10187	
October-23	2099	3677	3984	955	10715	
October-24	2213	3686	3917	901	10718	
April-23 to October-23	15810	26416	31085	5777	79089	
April-24 to October-24	16962	24861	27694	5927	75444	

3.6 The Commission observes that overall sales in October, 2024 is marginally higher as compared to October, 2023 due to increase in LT Sales.

3.7 MSEDCL has considered agriculture sales are estimated based on consumption norms as per Tariff Order and consumption obtained by FY 2024-25 is bifurcated monthly on the

basis of monthly input ratio of FY 2022-23 for estimation of monthly sale. The Commission while approving the FAC for the month of September, 2024 has restricted the agriculture sales to approved sales (based on the approved norm of Consumption/HP) as specified in MYT Tariff Order. MSEDCL in response to data gaps raised by the Commission has submitted the load (HP) details of agriculture connections. Further, the Commission has approved monthly sales for the agriculture connections. Accordingly, the Commission has computed the norm of consumption/HP based on the monthly approved agriculture sales and considered the norms based on monthly approved sales for allowing the sales for the month of October, 2024. Any adjustment in sales due to HP variation will be reconciled while actual data is submitted as per actual billing undertaken by MSEDCL. Based on the norms approved by the Commission in the Tariff Order, the agriculture sales - metered and unmetered approved by the Commission are as given below:

Metered				Unmetered	1	Total			
Particulars	Sale in MU's	Cumulative Load (HP)	Consumpti on / HP – Units	Sale in MU's	Cumulative Load (HP)	Consumpti on / HP - Units	Sale in MU's	Cumulative Load (HP)	Consumpti on / HP - Units
MSEDCL - April 24-Oct 24	10790	108786428	99	5927	60369901	98	16717	169156329	99
As Approved – April 24 - Oct 24	10340	108786428	95	5515	60369901	91	15854	169156329	94

3.8 Based on the agriculture sales approved in the above table, the Commission has restricted 241.96 MU of metered agriculture sales and 94.35 MU of unmetered agriculture sales for the month of October, 2024 and considered in computation of Distribution Loss to restrict the consumption based on actual sales per HP or approved Sales per HP, whichever is lower.

## 4. Power Purchase Details

- 4.1 The Commission has approved following sources in the Tariff Order for power purchase by MSEDCL.
  - a) MSPGCL
  - b) Central Generating Stations i.e., NTPC, TAPP etc.
  - c) IPPs i.e., JSW, Adani Power, Mundra UMPP, Emco, Rattan India and Sai Wardha
  - d) Renewable Energy (Solar and Non-Solar)

In addition to the aforesaid, MSEDCL procures power in short term, though the said source is not approved by the Commission, in case of any shortfall of approved sources or to optimize the power purchase cost. Also, there may be some variation in real time (unscheduled interchange) which will be settled through Balancing and Settlement Mechanism approved by the Commission.

4.1 Summary of Power Purchase from MSEDCL is as follows:



Sources of	MSEDCL has	nurchased nower fi	rom annuad	To a latine					
120000000000000000000000000000000000000	MSEDCL has	nurchased nower fi	nom anneauad						
anneouad	T	9 5							
approved	power is procured on power exchange to optimise the power purchase								
Power	cost								
1-04-547F-96-11-1410-11									
Merit Order				iling of power and					
Dispatch	(SA)								
Fuel				ation Plan (Detailed					
Utilization	Explanation give	en below – Para 5.8	and Para 5.9)						
Plan	9								
Deviation	MSEDCL has C	verdrawn (8.80 MU	J) from the actua	al schedule					
Quantum	nice and	100							
Sale of	MSEDCL has so	old 5.36 MU on Pov	ver Exchange at	Rs 6.50/kWh.					
Surplus Power									
Power	Actual Net Po	wer Purchase is 1	3293.33 MU	as against approved					
Purchase	12711.30 MU.								
Source wise				Proportion of each					
Power		Approved (MU)	Actual (MU)	Source in Actual					
Purchase	Ivaille			Purchase					
101 52 (50)	MSPGCL	5,147.69	4,581.17	34%					
	NTPC	2,188.94	3,050.91	23%					
	IPP	2,958.89	3,139.85	24%					
	Renewable	1,812.49	1,100.69	8%					
	Must Run	603.29	A CONTROL OF THE PARTY OF THE P	5%					
				5%					
	Sale of Power			0%					
	DSM	0.00		0%					
	Total	12,711.30	13,293.33	100%					
Purchase: a. Section 62 of Electricity Act, 2003	As part of verification of of MYT Order/Tan MSEDCL.	om the MTR Order SEDCL.  rification of energoperational parameteriff Regulations is of the second control of t	in Case No. 226 gy charges cla ers, fuel cost, G	of 2022 and invoice imed by MSEDCL CV etc. vis-à-vis the					
	Dispatch Fuel Utilization Plan Deviation Quantum Sale of Surplus Power Purchase Source wise Power Purchase Purchase  Power Purchase  A Section 62 Of Electricity	Merit Order Dispatch Pispatch Puel Usage of coal Explanation give Plan  Deviation Quantum  Sale of Surplus Power Power Purchase Power Purchase  Source wise Power Purchase  MSEDCL has of Surplus Power Purchase  Source Name  MSPGCL  NTPC IPP Renewable Must Run Short Term Sale of Power DSM Total  Power Purchase: a. Section 62 of Electricity Act, 2003  As part of verification of of MYT Order/Tam MSEDCL.	Merit Order Dispatch  Fuel Utilization Plan  Deviation Quantum  Sale of Surplus Power Purchase  Power Purchase  Power Purchase  Power Purchase  Actual Net Power Purchase is 12711.30 MU.  Source wise Power Purchase  MSPGCL  MSPGCL  Source Name  Approved (MU)  Most Run  Most Ru	Merit Order Dispatch  MSEDCL has followed merit order for schedule preference was given to cheapest power.  Fuel Utilization Plan  Deviation Quantum  Sale of Surplus Power Power Purchase  Actual Net Power Purchase is 13293.33 MU at 12711.30 MU.  Source wise Power Purchase  Source Name Purchase  Approved (MU)  MSEDCL 5,147.69  Approved (MU)  Actual (MU)  Actual (MU)  MSEDCL 5,147.69  Approved (MU)  Actual (M					

Sr. No.	Particular	Compliance
	b. Section 63 of Electricity Act, 2003 – IPPs	Cost and MUs verified as per Invoice.
9	RE Purchase	Cost and MUs verified as per summary of renewable purchase details submitted by MSEDCL and invoices of power purchased from SECI, NVVN and other IPPs.
10	Short Term Power Purchase	MSEDCL has purchased 688.88 MU at Rs 4.74/kWh in Short Term Market.

4.2 The following table show the variation in average power purchase cost (Rs/kWh) for the month of October, 2024 submitted by MSEDCL as compared to average power purchase cost approved in Tariff Order:

		der Dated 3			or October		Variation		
Particulars	Quantum PP Cost Power		Average Power Purchase	Quantum	PP Cost	Average Power Purchase Cost	Quantum	PP Cost	Average Power Purchase Cost
	MU	Rs. Crore	Rs/kWh	MU	Rs. Crore	Rs/kWh	MU	Rs. Crore	Rs/kWh
MSPGCL – Thermal	4,623.12	2,499.50	5.41	4,428.81	2,521.47	5.69	(194.31)	21.96	0.29
MSPGCL- Hydro	524.57	69.65	1.33	152.37	60.40	3.96	(372.20)	(9.25)	2.64
NTPC	2,188.94	897.76	4.10	3,050.91	1,376.61	4.51	861.97	478.85	0.41
1.JSW	0.00	16.05	-	183.93	109.81	5.97	183.93	93.76	
2.Mundra UMPP	438.07	249.07	5.69	449.49	214.61	4.77	11.43	(34.47)	(0.91)
3.Adani Power	1,574.87	893.50	5.67	1,646.33	1,611.20	9.79	71.46	717.71	4.11
4.Emco	116.36	46.87	4.03	125.65	62.44	4.97	9.29	15.56	0.94
5.Rattan India	698.17	285.62	4.09	566.03	282.02	4.98	(132.14)	(3.60)	0.89
6.Sai Wardha	131.42	63.78	4.85	168.41	70.73	4.20	36.99	6.95	(0.65)
Total IPPs (1 to 6)	2,958.89	1,554.90	5.25	3,139.85	2,350.82	7.49	180.96	795.92	2.23
7.Non- Solar	410.02	201.95	4.93	342.88	141.67	4.13	(67.14)	(60.27)	(0.79)
8.Solar	1,402.46	474.29	3.38	757.81	267.37	3.53	(644.65)	(206.92)	0.15
Renewable Energy	1,812.49	676.24	3.73	1,100.69	409.05	3.72	(711.79)	(267.19)	(0.01)



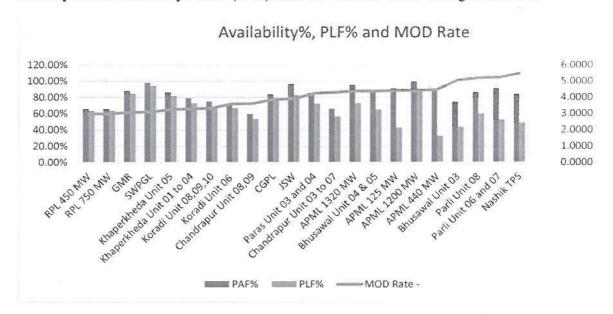
		ler Dated 3 d for Octol			or October. tted by MS		Variation		
Particulars	Quantum	PP Cost	Average Power Purchase Cost	Quantum	PP Cost	Average Power Purchase Cost	Quantum	PP Cost	Average Power Purchase Cost
	MU	Rs. Crore	Rs/kWh	MU	Rs. Crore	Rs/kWh	MU	Rs. Crore	Rs/kWh
including REC (7 to 8)									
Must Run - KAPP, TAPP, Dodson etc	603.29	191.65	3.18	728.39	236.30	3.24	125.10	44.66	0.07
Short Term	0.00	0.00		688.88	382.84	5.56	688.88	382.84	5.56
Sale of Power	0.00	0.00	-	5.36	3.48	6.50	5.36	3.48	6.50
DSM	0.00	0.00	-	8.80	19.79	22.49	8.80	19.79	22.49
PGCIL	0.00	336.44	F#	82	309.92	-	<u>.</u>	(26.52)	-
Total	12,711.30	6,226.13	4.90	13,293.33	7,663.70	5.77	582.04	1,437.56	0.87

- 4.3 Thus, for the month of October, 2024, total variation in power purchase cost is Rs. 1437.56 Crore, out of which Rs. 285.09 Crore was on account of higher quantum (582.04 MU) of power purchase and Rs. 1152.48 Crore was on account of higher rate of average power purchase by Rs. 0.87/kWh. FAC mechanism allows only impact of variation in power purchase rate to be passed through as FAC rate over and above approved tariff.
- 4.4 The detailed explanation in respect of approval of cost of power purchase of each of the source mentioned in the above table is given in subsequent paragraphs.

## 5. Power Purchase Cost

- 5.1 The Commission has sought detailed bills/invoices for all of the power purchase sources in order to verify the claim of MSEDCL with regards to average power purchase cost for the month of October, 2024. The Commission has verified the Net Purchase, Variable Cost, Fixed Charge and the Power Purchase Cost from the relevant bills/invoices received for all purchasing sources. MSEDCL has purchased power from approved sources as per the Tariff Order.
- 5.2 It was observed that due to planned/forced outages during the month, the availability of some of the MSPGCL and IPP generating stations was lower than normative availability.
- 5.3 The Commission notes that CGS stations having lower variable cost were dispatched almost to the extent of availability declared by the generator.
- 5.4 The Commission has also verified the PLF% and MOD rates of all the operational State Generating Stations and IPPs and has found the property having lower rates in MOD had

higher PLF. The graph showing the comparison of Variable Cost in MoD Stack and monthly Plant Availability Factor (PAF) and PLF for SGS and IPPs is given below:



SGS/IPPs Stations are considered for comparison and MOD Rate considered is as applicable from 17 October, 2024 to 22 October, 2024.

#### MSPGCL:

- 5.5 The Commission has observed that MSEDCL has purchased 4002.96 MU from MSPGCL Thermal and Gas Stations. It was observed that MSEDCL has purchased energy from Parli 6-7, Parli 8 and Uran generating stations of MSPGCL even though not included in MoD stack approved by the Commission in the Tariff Order to meet the demand due to outage of CGS units (TAPS) and also lower generation from RE sources than approved by the Commission.
- 5.6 The total overall generation was lower than approved during the month. The monthly fixed cost was payable in line with MYT Regulations, 2019 considering the availability of the Plant. The Commission has verified that the fixed cost for all the Thermal/Gas Units as well as Hydro Units has been considered as per invoice raised by MSPGCL for October, 2024. The comparison of Actual and Approved Fixed and Variable Cost of MSPGCL Thermal/Gas units as shown in the table below shows the impact of fixed cost due to lower actual generation.

	Approved for October, 2024						Actual for October, 2024				Variations					
Particular 8	Quantum	VC	VC	FC	FC	APPC	Quantu m	vc	VC	FC	FC	APPC	Quantum	VC	FC	APP C
	MU	Rs./k Wh	Rs. Crore	Rs. Crore	Rs./k Wh	Rs./k Wh	MU	Rs./k Wh	Rs. Crore	Rs. Crore	Rs./k Wh	Rs./k Wh	MU	Rs./k Wh	Rs./k Wh	Rs./k Wh
MSPGCL - Thermal	4,623.12	3.76	1,738.30	761.20	1.65	5.41	4,428.81	3.98	1,763.08	758.38	1.71	5.69	(194,31)	0.22	0.07	0.29

Variable charge inclusive of other charges (Fuel adjustment charges, CIL etc.)



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- 5.7 The Commission has verified that fixed cost for all the Thermal/Gas Units as well as Hydro Units has been considered as per invoice raised by MSPGCL and as submitted by MSEDCL for the said units.
- 5.8 The Commission in its Order dated 31 March, 2023 in Case No 227 of 2022 has approved coal mix of generating stations as proposed by MSPGCL for FY 2023-24 and FY 2024-25. The said coal mix included coal beneficiation and procurement of imported coal to meet the requirement of coal for maintaining normative availability and accordingly approved the variable/energy charges for the MSPGCL Stations.
- 5.9 The Commission notes that while approving the FUP, the washed coal and imported coal was required to be used in all the MSPGCL stations except Paras and Parli Stations. However, MSPGCL has finalised tie up for imported coal through competitive bidding from June 2022. The washed coal was used as per FUP except for Bhusawal and imported coal was also used as per FUP except for Koradi 8-10 unit.
- 5.10 MSEDCL submitted that CIMFR reports for most of the coal samples for coal supplied in October, 2024 are yet to be received, hence MSPGCL has raised provisional FAC bill considering GCV as per the methodology submitted by MSPGCL in Case No 97 of 2020 as given below:
  - a. GCV- As Billed: Consideration of certified loading end GCV data wherever available and where certified data is not available, use mid-point of declared grade GCV.
  - b. GCV As Received: GCV is considered based on the results available at each Station from their respective Station Laboratory.

Accordingly, MSPGCL has raised provisional FAC bill dated 12 November, 2024 considering the aforesaid methodology.

5.11 The comparison of Approved and Actual Energy Charge (including FAC) is as given below:

Power Station	Approved Energy Charge Rs/kWh	Actual Energy Charge Rs/kWh	Difference Rs/kWh	Difference %
Bhusawal Unit 03	4.461	5.081	0.620	13.90%
Bhusawal Unit 04 & 05	3.746	4.429	0.683	18.23%
Khaperkheda Unit 1 to 4	4.218	3.461	-0.757	-17.95%
Khaperkheda Unit 05	4.019	3.095	-0.924	-22.99%
Nashik TPS	4.641	5.490	0.849	18.29%
Chandrapur Unit 03 to 07	4.097	4.285	0.188	4.59%
Chandrapur Unit 08,09	3.442	3.602	0.160	4.65%
Paras Unit 03 and 04	3.510	4.120	0.610	17.38%
Parli Unit 06 and 07	5.096	5.223	0.127	2.49%
Parli Unit 08	5.052 TOUTH RE	5.231	0.179	3.54%

Power Station	Approved Energy Charge Rs/kWh	Actual Energy Charge Rs/kWh	Difference Rs/kWh	Difference %	
Koradi Unit 06	3.368	3.302	-0.066	-1.96%	
Koradi Unit 08,09,10	3.119	3.264	0.145	4.65%	
GTPS Uran	6.760	5.246	-1.514	-22.40%	

- 5.12 The Commission notes that for the month of October, 2024, Energy Charge of all stations have increased except for Khaperkheda, Koradi 6 and Uran as compared to approved Energy Charge. The Commission notes that Energy Charge has been computed by considering GCV Loss (As Billed As Received) of 650 kCal/kg as approved by the Commission in the Order dated 1 February, 2024 in Case No 132 of 2023.
- 5.13 MSPGCL has undertaken Case-4 bidding and accordingly entered into contract with Ideal Energy Projects Limited (IEPL) at Rs. 3.507/kWh for supply of 180 MW net sent out in lieu of power from one unit of at Nashik by transfer of corresponding linkage coal quantity to IEPL unit for 36 Months. The power from IEPL started from 16 May, 2024. The Commission has granted approval for the said purchase in its Order dated 27 February, 2024 in Case No 14 of 2024. Accordingly, for the month of October, 2024. IEPL has supplied 138.80 MU at Rs 3.495/kWh. The Commission has accordingly considered the said purchase of 138.80 MU for Rs 48.51 Crore at Rs 3.49/kWh.
- 5.14 Considering the overall cost of MSPGCL thermal/gas stations, the average power purchase cost is Rs. 5.69/kWh as against Rs. 5.41/kWh approved in the Tariff Order. The average power purchase cost is higher due to higher variable cost by Rs 0.22/kWh and fixed cost by Rs 0.07/kWh due to lower generation than approved by the Commission.
- 5.15 Variation in power purchase expenses from MSPGCL can be divided on account of change in quantum and per unit rate as follows:

	Increase in Expenses for	power purchase from MSPG	SPGCL (Rs. Crore)			
Month	On Account of change Quantum of Power Purchase	On Account of change in Per Unit rate of Power Purchase	Total			
October, 2024	(105.06)	127.02	21.96			

5.16 Out of above, variation on account of per unit rate is only considered for FAC computation.

#### NTPC:

5.17 MSEDCL has purchased total 3050.91 MU of power from NTPC's stations as compared to approved MoD stack of 2188.94 MU during the month of October, 2024.



5.18 The Table below shows the variation in power purchase in terms of per unit variable charge, per unit fixed charge and average power purchase cost for NTPC's generating stations for October, 2024.

		App	roved for Oc	tober, 2024			Actual for October, 2024						Variations				
Particul	Quantum	VC	VC	FC	FC	APP C	Quantu m	VC	vc	FC	FC	AP PC	Quantum	VC	FC	APPC	
ars	MU	Rs./k Wh	Rs. Crore	Rs. Crore	Rs./ kWh	Rs./k Wh	MU	Rs./kWh	Rs. Crore	Rs. Crore	Rs./k Wh	Rs./ kW h	MU	Rs./k Wh	Rs./k Wh	Rs./kW h	
NTPC	2,188.94	2 05	448.05	449.71	2.05	4.10	3,050.91	3.01	916.87	459.74	1.51	4.51	861.97	0.96	(0.55)	0.41	

Variable charge inclusive of other charges (Fuel adjustment charges, CIL etc.)

- 5.19 MSEDCL has also claimed Rs 120.51 Crore (for each instalment) in view of tariff determination by Hon'ble CERC for NTPC Lara and Solapur Stations in 6 instalments and supplementary invoice raised by NTPC as per the said Order. The Commission has verified that actual quantum of power purchase and cost from the detailed summary bills/invoices submitted by MSEDCL and found to be in order and accordingly considered the same in FAC computation.
- 5.20 Variation in power purchase expenses from NTPC can be divided into on account of change in quantum and per unit rate as follows:

	Increase in Expenses	for power purchase from NTI	PC (Rs. Crore)
Month	On Account of change Quantum of Power Purchase	On Account of increased Per Unit rate of Power Purchase	Total
October, 2024	353.52	125.32	478.85

Out of above, variation on account of per unit rate is only considered for FAC computation.

#### **IPPs**

- 5.21 MSEDCL has long term PPA's with IPP's viz: JSW, CGPL Mundra, APL, Emco and Rattan India. The said PPAs are approved by the Commission and power availability from the said sources is considered as per Tariff Order issued by the Commission. Further, MSEDCL has signed PPA with Sai Wardha Power Generation Ltd (SWPGL) for 240 MW as per the Order dated 15 June 2020 in Case No 91 of 2020. SWPGL started delivering 240 MW power to MSEDCL from 5 July 2020.
- 5.22 During scrutiny of the invoices submitted by MSEDCL it was observed that there were differences in the other charges related to Change in Law as considered in FAC computations. The Commission sought clarifications on the same along with reconciliation and additional bills, if any. MSEDCL submitted the reconciliation and clarified that the aforesaid differences are mainly on account of Change in Law (CIL) claim by IPPs in addition to monthly energy bills during the respective period.

5.23 Change in Law (CIL) events in respect of IPPs are related to imposition of GST compensation cess, change in royalty, custom duty, change in NCDP, shortfall in domestic coal etc. These Change in Law events have been approved by the respective Commission's through various Orders, as the case may be, under the provisions of respective PPAs. MSEDCL has submitted the CIL invoices for the concerned period. Further, while scrutinizing the CIL bills it was observed that the amount shown in CIL bills/invoices were not matching against the respective amount considered in FAC computation. In fact, the amounts considered in FAC calculations were observed to be lesser than that of CIL bills/invoices except for claim related to SHAKTI. Change in Law claims raised by the generators are according to their technical parameters, whereas MSEDCL works out the CIL claim amount based on normative / actual parameters. These parameters include SHR of power plant, Auxiliary consumption, GCV of coal, etc. which have impact of coal consumption. Therefore, there is difference in CIL amount claimed by generator and that worked out by MSEDCL. MSEDCL has submitted the detailed reconciliation of CIL, as summarised in Table below:

IPP	As per	r Vendor –	Rs Cr	As per	MSEDCL	- Rs Cr
	CIL	Shakti	Total	CIL	Shakti	Total
JSW	-	_	-	-	-	_
CGPL	-	-	-	-	-	-
APL 125 MW	3.41	9.98	13.38	1.57	9.98	11.55
APL 1320 MW	30.85	104.71	135.56	28.96	104.71	133.67
APL 1200 MW	32.69	95.78	128.47	30.57	95.78	126.35
APL 440 MW	5.27	15.44	20.71	4.23	15.44	19.67
GMR	6.63	3.29	9.92	6.63	3.29	9.92
RIPL 450 MW	12.37	-	12.37	8.80	-	8.80
RIPL 750 MW	20.61	-	20.61	14.66	-	14.66
Sai Wardha	6.93	-	6.93	6.93	-	6.93
Total	118.75	229.19	347.95	102.35	229.19	331.54

5.24 The Commission notes that, in addition to the aforesaid, MSEDCL has also submitted claim of Rs 22.33 Crore towards Change in Law of JSW in respect of Auxiliary Consumption as per judgment of Hon'ble APTEL in Appeal No 33 of 2019 and the said amount is claimed after being paid to JSW under protest in October, 2024. MSEDCL has also claimed Rs 232.01 Crore towards reconciliation of Change in Law amount of APL as per judgment of Hon'ble Supreme Court in CA No 684 of 2021. Further, MSEDCL has also claimed Change in Law amount of Rs 542.60 Crore as compensation towards coal shortfall as per judgment of Hon'ble APTEL dated 9 July, 2024 in Appeal No 261 of 2021. MSEDCL has filed appeal against the said Order before Hon'ble Supreme Court vide CA 10432 of 2024. Therefore, payment of Rs. 542.60 Crore is made under protest subject to outcome of CA No 10432 of 2024. MSEDCL has also claimed Rs 41.30 Crore and Rs 38.02 Crore in respect of RPL as per judgments of Hon'ble APTEL in Appeal No 41 of 2019 and Appeal No. 422 of 2022 and 169 of 2023 respectively. Also, MSEDCL has paid Rs 11.07 Crore (as 4th instalment) to GMR as per CERC Order in Case No 25 of



2020. The same has been considered by the Commission in FAC computation for the current month.

5.25 The table below shows the variation in power purchase in terms of per unit variable charge, per unit fixed charge and average power purchase cost for IPPs for October, 2024.

		App	roved for Oc	tober, 2024			3 45	Act	ual for Octob	er, 2024				Variat	ions	
Particul ars	Quantum	VC	VC_	FC	FC	APP C	Quantu m	vc	VC	FC	FC	APPC	Quantum	VC	FC	APPC
	MU	Rs./k Wh	Rs. Crore	Rs. Crore	Rs./ kWh	Rs./k Wh	MU	Rs./kWh	Rs. Crore	Rs. Crore	Rs./k Wh	Rs./k Wh	MU	Rs./k Wh	Rs./k Wh	Rs./kW
1.JSW	120		-	16.05		-	183.93	5.10	93.86	15.96	0.87	5.97	183.93	:=	870	BUEU
2.Mundr a UMPP	438.07	4.77	208.84	40.23	0.92	5.69	449.49	3.73	167.50	47.10	1.05	4.77	11.43	(1.04)	0.13	(0.91)
3.Adani Power	1,574.87	4.43	697.16	196,34	1.25	5.67	1,646.33	8.57	1,410.37	200.84	1.22	9.79	71.46	4,14	(0.03)	4.11
4.Emco	116.36	2,77	32.27	14.61	1.26	4.03	125.65	3.76	47.21	15.23	1.21	4.97	9.29	0.98	(0.04)	0.94
5 Rattan India	698.17	3.26	227.91	57.71	0.83	4.09	566.03	4.18	236.45	45.57	0.81	4,98	(132.14)	0.91	(0.02)	0.89
6 Sai Wardha	131.42	3.33	43,73	20.04	1.53	4.85	168.41	2.99	50.30	20.43	1.21	4.20	36.99	(0.34)	(0.31)	(0.65)
Total IPPs (1 to 6)	2,958.89	4.09	1,209.91	344.98	1.17	5.25	3,139.85	6,39	2,005.69	345.13	1.10	7.49	180.96	2.30	(0.07)	2.23

Variable charge inclusive of other charges, CIL etc.

5.26 Variation in power purchase expenses from IPPs can be divided into increased on account of change in quantum and per unit rate as follows:

	Increase in Expense	s for power purchase from IP	P (Rs. Crore)
Month	On Account of change Quantum of Power Purchase	On Account of increased Per Unit rate of Power Purchase	Total
October, 2024	95.09	700.83	795.92

Out of above, variation on account of increased per unit rate is only considered for FAC computation.

#### Short Term Power Purchase

5.27 MSEDCL has purchased 688.88 MU at average rate of Rs. 4.74/kWh for October, 2024 from Power Exchange and Bilateral market through competitive bidding. The Commission has considered the said purchase in FAC computation of October, 2024. The Commission has also raised query in respect of Rs. 65.91 Crore paid towards compensation for not returning banked power to TPDDL in July and August for power banked in March 2024 and asked MSEDCL to submit the cost benefit analysis in respect of said compensation paid. Due to summer season, in the month of March-24, as per historical trend the expected demand was higher and hence to meet the demand, MSEDCL has contracted bilateral power of 1010 MW from Short term Tenders and balance from the banking arrangement entered with TPDDL. The average rate of bilateral contract (short term) power purchase in MSEDCL would have to purchase the same

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quantum of power through the tenders at the rate about Rs. 7.64/kWh per unit. Hence by the way of said Banking arrangement, MSEDCL has imported 108.40 MU in the month of March-24 and avoided the additional purchase from short term tenders. Thus, MSEDCL replaced the power amounting Rs. 82.82 Crore-(A) through the TPPDL banking arrangement. Due to restrictions imposed by NLDC on short-term transactions, MSEDCL has requested NLDC to allow the scheduling of TPDDL banking power, but NLDC had denied MSEDCL's request and MSEDCL was unable to return the said banked power in the month of July-24 & August-24. Thus, as a last resort MSEDCL was constrained for the payment of compensation to TPDDL. If MSEDCL would have supplied the returned banked energy i.e. 111.65 MUs to TPDDL, the power will be supplied from the contracted thermal generating stations which were on bar as per MoD stack for return period i.e. in the month of July-24 and August-24. In the month of July-24 and August-24, Nashik and APML (unit 1,4,5 - 440 MW) generating station were on bar having the variable cost of Rs. 5.117 per unit and Rs. 5.1476 per unit respectively and if power was supplied during these months to TPDDL, the returned energy would be supplied from these generating stations. Thus, Cost of power if supplied to TPDDL would be Rs. 56.38 Crore. The Commission notes that MSEDCL was not able to return the power to TPDDL due to restrictions imposed by NLDC due to non-payment of dues of RGPPL. MSEDCL in such a scenario could have explored the alternate routes of supplying power to TPDDL like it has asked MSPGCL to purchase power in September, 2024 or asked TDPPL to purchase power from IEX or arranged from any other generator at a lower rate rather than paying compensation of Rs 6/kWh. Further, the Commission notes that, as submitted by MSEDCL, the marginal cost power which would have been utilised to return the power was at the lower rate than Rs 6/kWh and had no restrictions would have been in place due to non-payment by MSEDCL, MSEDCL would have incurred cost of only Rs 56.38 Crore instead of Rs 65.91 Crore paid to TPDDL. Accordingly, the Commission has considered Rs 56.38 Crore towards compensation paid to TPDDL. However, the Commission directs MSEDCL to make detailed submission in respect of the said claim in the ensuing MYT Petition.

#### Must-Run Sources

- 5.28 The sources of Must Run Stations include KAPP, TAPP 1&2, TAPP 3&4, SSP, Pench, Dodson I and Dodson II, Renewable Energy and MSPGCL Hydro (including Ghatghar) etc.
- 5.29 A detailed comparison of approved against actual purchase from Must Run Stations is shown in Table below:

		App	proved for O	ctober, 202	4		Actual for October, 2024						Variations			
Particular s	Quantu m	vc	VC	FC	FC	APP C	Quantu m	VC	VC	FC	FC	APPC	Quantum	VC	FC	APPC
	MU	Rs./k Wh	Rs. Crore	Rs. Crore	Rs./ kWh	Rs./k Wh	MU	Rs./kW	Rs. Crore	Rs. Crore	Rs./k Wh	Rs./k Wh	MU	Rs./k Wh	Rs./k Wh	Rs./kW
MSPGCL- Hydro*	524.57		9	25.85	0.49	0.49	152.37	0.26	4.00	14.88	0.98	1.24	(372,20)	0.26	0.48	0.75
MSPGCL- Hydro Lease rent				43.80				0.20	1.00	41.52	0.70	1.24	(372,20)	0.20	0.48	0.73



		App	proved for O	ctober, 202	4			Ac	tual for Octo	ober, 2024			Variations			
Particular s	Quantu m	vc	VC	FC	FC	APP C	Quantu m	VC	vc	FC	FC	APPC	Quantum	VC	FC	APPC
	MU	Rs./k Wh	Rs. Crore	Rs. Crore	Rs./ kWh	Rs./k Wh	MU	Rs./kW h	Rs. Crore	Rs. Crore	Rs./k Wh	Rs./k Wh	MU	Rs./k Wh	Rs./k Wh	Rs./kW h
1.Non- Solar	410.02	4.93	201.95	-		4.93	342.88	4.01	137.43	4.24	0.12	4.13	(67.14)	(0.92)	0.12	(0.79)
2 Solar	1,402.46	3.38	474.29	20	*	3.38	757.81	3.53	267.37			3.53	(644.65)	0.15	-	0.15
Renewabl e Energy including REC (1 to 2)	1,812.49	3.73	676.24	-		3.73	1,100.69	3,68	404.31	4.24	0.04	3.72	(711.79)	(0.05)	0.04	(0.01)
Others- KAPP, TAPP, Dodson etc	603.29	3.14	189.62	2.02	0.03	3.18	728.39	3.22	234.28	2.02	0.03	3.24	125.10	0.07	(0.01)	0.07

<sup>\*</sup>Variable Cost for Hydro Power is approved in MSPGCL Order whereas total cost is considered under Fixed Cost in the Tariff Order of MSEDCL.

- 5.30 As seen from the aforesaid table, MSEDCL has purchased 152.37 MU of Hydro Power as per variable cost approved by the Commission. This being the cheapest source of power helps in reduction of overall average cost of power purchase. The Koyna generation works on the principle of water year (1st June to 30 May) and hence the available water is used for the peak requirement based on the requirement of MSEDCL. It is observed that hydro purchase is lower than 524.57 MU approved by the Commission as water is preserved for meeting the demand for peak months.
- 5.31 It is observed that Solar and Non-Solar energy purchased in October, 2024 i.e., 1100.69 MU was lower than approved i.e., 1812.40 MU by the Commission in the Tariff Order. The generation is lower mainly due to lower capacity addition than new PPAs executed by MSEDCL for Wind Power. MSEDCL has not purchased any RECs in the month of October, 2024. The Commission has considered the renewable purchase as per details submitted by MSEDCL and invoices of power purchased from SECI, NVVN and other IPPs.

#### ISTS Charges - CTU

5.32 As per Regulation 10 of the MYT Regulations, 2019, any variation in Inter-State Transmission Charges shall be pass through under FAC component of Z-factor charge as an adjustment in Tariff on monthly basis. The ISTS charges paid by MSEDCL to Central Transmission Utility of India Ltd (CTU) are considered under FAC computation. Accordingly, the Commission has considered the amount of Rs. 309.92 Crore towards ISTS charges payable to CTU as against Rs. 336.44 Crore approved in the Tariff Order towards FAC computation as per invoice raised by CTU.

#### Sale of Power

5.33 MSEDCL has sold 5.36 MU at Rs 6.50/kWh on Power Exchange and earned revenue of Rs 3.48 Crore. The Commission has considered the said sale for October, 2024.

## **Deviation Quantum and Cost**

5.34 MSEDCL has submitted that the deviation quantum (over drawl) of 8.80 MU. As per invoice raised by MSLDC, the quantum is 8.80 MU and corresponding amount payable is Rs. 19.79 Crore. MSEDCL has not claimed ADSM charges as per provision of MYT Regulations. Accordingly, the Commission has considered the said Deviation quantum and cost in the FAC computation for the month of October, 2024.

## **Approved Cost of Power Purchase**

5.35 In view of the above, the overall cost approved in the Tariff Order and actual for the month of October, 2024 considered by the Commission is as shown below:

		App	proved for O	ctober, 2024				Ac	tual for Octo	ber, 2024				Varia	tions	
Particul	Quantum	VC	VC	FC	FC	APP C	Quantum	vc	VC	FC	FC	AP PC	Quantum	VC	FC	APPC
ars	MU	Rs./k Wh	Rs. Crore	Rs. Crore	Rs./ kWh	Rs./k Wh	MU	Rs./kW	Rs. Crore	Rs. Crore	Rs./k Wh	Rs./ kW	MU	Rs./k Wh	Rs./k Wh	Rs./kW
MSPGC L – Thermal	4,623.12	3.76	1,738.30	761.20	1.65	5.41	4,428.81	3.98	1,763.08	758.38	1.71	5.69	(194.31)	0.22	0.07	0.29
MSPGC L-Hydro	524.57	-		25.85	0.49	0.49	152.37	0.26	4.00	14.88	0.98	1.24	(372.20)	0.26	0.48	0.75
MSPGC L- Hydro Lease Rent	_	1245	<u> </u>	43.80	_	-	_	-		41.52		_				
NTPC	2,188.94	2.05	448.05	449.71	2.05	4.10	3,050.91	3.01	916.87	459.74	1.51	4.51	861.97	0.96	(0.55)	0.41
IPPs	2,958.89	4.09	1,209.91	344.98	1.17	5.25	3,139.85	6.39	2,005.69	345.13	1.10	7.49	180.96	2.30	(0.07)	2.23
RE includin g REC	1,812.49	3.73	676.24	_		3.73	1,100.69	3.68	404.81	4.24	0.04	3.72	(711.79)	(0.05)	0.04	(0.01)
Must Run - KAPP, TAPP, Dodson etc	603.29	3.14	189.62	2.02	0.03	3.18	728.39	3.22	234.28	2.02	0.03	3.24	125,10	0.07	(0.01)	0.07
Short Term	_	(4)			-	-	688.88	5.56	382.84	2,02	0.00	5.56	688.88	-	- (0.01)	
Sale of Power		-			-	-	5.36	6.50	3.48		_	6.50	5.36			
DSM		150	U.5a	-	858	-	8.80	22.49	19.79	_		22.4	8.80	-		
PGCIL	<u>u</u>	-	-	336.44	-	-	100	-		309.92	-	•	-	155	73	
Total	12,711.30	3.35	4,262.13	1,964.01	1.55	4.90	13,293.33	4.31	5,727.87	1,935.83	1.46	5.77	582.04	0.96	(0.09)	0.87

Variable charge inclusive of other charges (Fuel adjustment charges, CIL etc.)

5.36 The overall power purchase cost is higher than approved by the Commission mainly due to higher rate of power purchase cost from MSPGCL and NTPC than approved by the Commission which also includes NTPC's claim of Rs 120.31 Crore as per CERC Order for NTPC Lara and Solapur. Change in Law claim considered for JSW, APL, GMR and RPL.



5.37 Considering the above, the Commission allows the average power purchase cost of Rs. 5.77/kWh for the month of October, 2024 as against Rs. 4.90/kWh approved in the Tariff Order.

## 6. FAC on account of fuel and power purchase cost (F)

- 6.1 The Commission has worked out the average power purchase cost for the month of October, 2024 as shown in above table. The same has been compared with the average power purchase cost approved by the Commission in Tariff Order dated 31 March, 2023 and accordingly arrived at differential per unit rate at which Z<sub>FAC</sub> is to be passed on to the consumers.
- 6.2 The following table shows the Z<sub>FAC</sub> worked out by the Commission on account of difference in fuel and power purchase cost for the month of October, 2024.

S. No.	Particulars	Units	October, 2024
l	Average power purchase cost approved by the Commission	Rs. /kWh	4.90
2	Actual average power purchase cost	Rs. /kWh	5.77
3	Change in average power purchase cost (=2 -1)	Rs. /kWh	0.87
4	Net Power Purchase	MU	13,293.33
5	Change in fuel and power purchase cost (=3 x 4/10)	Rs. Crore	1,152.48

#### 7. Adjustment for over recovery/under recovery (B)

7.1 The adjustment for over recovery/under recovery has to be done for the (n-4) month as per provisions of MYT Regulations, 2019. The Commission has allowed FAC recovery from October 23 onwards. MSEDCL submitted FAC recovery of Rs. 748.81 Crore for the month of October, 2024 as against approved amount of Rs. 629.87 Crore. Thus, the adjustment factor to be considered towards over recovery is Rs. 118.94 Crore while computing the allowable FAC for October, 2024.

#### 8. Carrying Cost for over recovery/under recovery (C)

8.1 The following table shows the interest rate and amount worked as carrying / holding cost for under/ over recovery for the month of October, 2024:

S. No.	Particulars	Units	October-24
1	Adjustment factor for over-recovery/under-recovery	Rs. Crore	(118.94)
2	Interest rate	%	10.45%
3	Holding/Carrying cost for (over- recovery)/under-recovery	Rs. Crore	(1.04)

## 9. Disallowance due to excess Distribution Loss

9.1 Regulation 10.8 of MYT Regulations, 2019 provides for FAC amount to be reduced in case the actual distribution loss for the month exceeds the approved distribution loss. The relevant extract is reproduced as follows.

"10.8 The total Z<sub>FAC</sub> recoverable as per the formula specified above shall be recovered from the actual sales in terms of "Rupees per kilowatt-hour":

Provided that, in case of unmetered consumers, the  $Z_{FAC}$  shall be recoverable based on estimated sales to such consumers, computed in accordance with such methodology as may be stipulated by the Commission:

Provided further that, where the actual annual sliding distribution losses of the Distribution Licensee exceed the level approved by the Commission, the amount of  $Z_{FAC}$  corresponding to the excess distribution losses (in kWh terms) shall be deducted from the total  $Z_{FAC}$  recoverable"

9.2 The following table provides the comparison of approved and actual distribution loss and disallowance due to excess distribution loss if any.

S. N	Particulars	Units	Approved in Tariff Order	Actual for October, 2024	Actual – cumulative up to October, 2024	Annual Sliding Distribution Loss – November, 23 to October, 24
1	Net Energy Input at Distribution Voltage	MU	1,27,913.14	11,638.68	81,138.28	142676.31
2	MSEDCL Metered Sales (excluding sales at EHV level)	MU	1,03,900.40	8,531.51	61,239.86	101194.84
3	Estimated Consumption of unmetered Sales	MU	8,719.33	806.61	5,514.70	10176.01
4	Distribution Loss (1-2-3)	MU	15,293.41	2,300.55	14,383.72	31305.45
5	Distribution Loss as % of net energy input (4/1)	%	12.00%	19.77%	17.73%	21.94%
6	Excess Distribution Loss = [Actual Distribution Loss (5) - Distribution loss approved] x Net Energy Input (1)	MU	-	-	-	1,157.07
7	Disallowance of FAC due to excess Distribution Loss	Rs. Crore	2=	-	-	115.07

9.3 As seen from the above table, the standalone distribution loss for the month of October, 2024 is higher at 19.77% as against approved loss of 12%. The standalone loss for



October, 2024 is higher mainly due to estimated Ag sales and sales considered as per billing cycle whereas power purchase is considered for the standalone month. Also, the Commission has restricted the Ag Sales as per norms approved in the Tariff Order leading to higher loss.

9.4 The comparison of Distribution Loss for October, 2024 as compared to last year is as given below:

Particulars	FY 2024-25	FY 2023-24
Approved Loss	12%	13%
April	26.42%	26.38%
May	22.99%	25.90%
June	8.99%	21.36%
July	12.24%	15.04%
August	15.24%	24.52%
September	15.34%	22.89%
October	19.77%	29.61%
Cumulative up to October	17.73%	23.92%

9.5 Since Annual Sliding Distribution Loss of 21.94% is higher than the approved loss of 12%, the Commission has worked out disallowance of Rs 115.07 Crore on account of excess Distribution Loss for the month of October, 2024.

## 10. Summary of Allowable ZFAC

10.1 The summary of the FAC amount as approved by the Commission for the month of October, 2024 is as shown in the Table below:

S. No.	Particulars	Units	October, 2024-As submitted	October, 2024- As Approved
1	Calculation of ZFAC			
1.1	Change in cost of generation and power purchase attributable to Sales within the License Area (F)	Rs. Crore	1,163.09	1,152.48
1.2	Carrying cost for over-recovery/under-recovery (C)	Rs. Crore	(1.04)	(1.04)
1.3	Adjustment factor for over-recovery/under-recovery (B)	Rs. Crore	(118.94)	(118.94)
1.4	ZFAC = F+C+B	Rs. Crore	1,043.11	1,032.50
2	Calculation of Per Unit FAC		20317153459	
2.1	Energy Sales within the License Area	MU	10,689.10	10,381.98*
2.2	Excess Distribution Loss	MU	1,113.61	1,157.07
2.3	ZFAC per kWh	Rs. /kWh	0.98	0.99

S. No.	Particulars	Units	October, 2024-As submitted	October, 2024- As Approved
3	Allowable FAC			
3.1	FAC disallowed corresponding to excess Distribution Loss [(2.2 x 2.3)/10]	Rs. Crore	3.67	115.07
3.2	FAC allowable [1.4-3.1]	Rs. Crore	1,297.20	917.43
4	Utilization of FAC Fund			
4.1	Opening Balance of FAC Fund	Rs. Crore	255.53	255.53
4.2	Carrying Cost/(Holding Cost) on FAC Fund	Rs. Crore	2.23	2.23
4.3	Z <sub>FAC</sub> for the month (Sr. N. 3.2)	Rs. Crore	1039.44	917.43
4.4	Closing Balance of FAC Fund	Rs. Crore	1297.20	1175.19
4.5	Z <sub>FAC</sub> leviable/(refundable) to consumer	Rs. Crore	1297.20	1175.19
5	Total FAC based on category wise and slab wise allowed to be recovered	Rs. Crore	1297.20	629.87

<sup>\*</sup>Sales restricted as per Ag norms approved by the Commission

10.2 The FAC approved is lower than claimed by MSEDCL due to higher disallowance in view of excess distribution loss approved by the Commission.

#### 11. Recovery from Consumers:

11.1 Regulation 10.9 of MYT Regulations, 2019 provides for methodology of recovery of FAC charge from each category of consumers. The relevant extract is reproduced as below.

"10.9 The ZFAC per kWh for a particular Tariff category/sub-category/consumption slab shall be computed as per the following formula:—

 $Z_{FAC\ Cat}\ (Rs/kWh) = [Z_{FAC}/(Metered\ sales + Unmetered\ consumption\ estimates + Excess\ distribution\ losses)]*k*10, Where:$ 

 $Z_{FAC\ Cat} = Z_{FAC\ component\ for\ a\ particular\ Tariff\ category/sub-category/consumption\ slab\ in\ 'Rupees\ per\ kWh'\ terms;$ 

k = Average Billing Rate / ACOS;

Average Billing Rate = Average Billing Rate for a particular Tariff category/sub-category/consumption slab under consideration in 'Rupees per kWh' as approved by the Commission in the Tariff Order:

Provided that the Average Billing Rate for the unmetered consumers shall be based on the estimated sales to such consumers, computed in accordance with such methodology as may be stipulated by the Commission:



ACOS = Average Cost of Supply in 'Rupees per kWh' as approved for recovery by the Commission in the Tariff Order:

Provided that the monthly  $Z_{FAC}$  shall not exceed 20% of the variable component of Tariff or such other ceiling as may be stipulated by the Commission from time to time:

Provided further that any under-recovery in the  $Z_{FAC}$  on account of such ceiling shall be carried forward and shall be recovered by the Distribution Licensee over such future period as may be directed by the Commission..."

- 11.2 The Commission allows the FAC amount of Rs. 917.43 Crore for the month of October, 2024 to be added to the FAC Fund of Rs 255.53 Crore as on September, 2024. Thus, the closing balance of FAC fund as on October, 2024 including carrying cost is Rs. 1175.19 Crore.
- 11.3 The Commission in its approval for the month of September, 2024 has allowed FAC recovery of Rs 629.87 Crore/month including Carrying Cost up to December, 2024. It has been consistent philosophy of the Commission to avoid any variation in tariff of the consumers. Thus, to avoid any variation in tariff, the Commission has decided to continue the recovery of same amount of Rs 629.87 Crore and allow the recovery of said amount from FAC Fund existing as on October, 2024 in January, 2025. The FAC fund along with carrying cost up to October, 2024 is Rs 1175.19 Crore. Considering the allowed recovery of Rs 629.87 Crore, the balance amount of Rs 545.32 Crore is being carried forward to next FAC billing cycle.
- 11.4 In a view of above, the per unit Z<sub>FAC</sub> for the month of October, 2024 to be levied on consumers of MSEDCL in the billing month of January, 2025 is as given below. The rate of FAC is rounded for Rs.0.05 as per letter dated 5 April, 2022. Therefore, same may be reconciled in the next approvals on under/ over recovery:

Category	Z <sub>FAC</sub> for the month of January, 2025 (Rs/kWh, Rs/kVAh, Rs/HP – as Applicable)
LT Category	
Residential (LT-I)	
BPL (0-30 Units)	0.20
Consumption > 30 Units per month	
1-100 Units	0.45
101-300 Units	0.80
301-500 Units	1.10
Above 500 Units	1.15
Non-Residential (LT-II)	
0-20 kW	0.80
>20-50 kW	1.10
>50 kW	1.25

Category	Z <sub>FAC</sub> for the month of January, 2025 (Rs/kWh, Rs/kVAh, Rs/HP – as Applicable)
Public Water Works (LT-III)	rippireubie)
0-20 kW	0.35
20-40 kW	0.50
Above 40 kW	0.60
Agriculture (LT-IV)	2
AG unmetered Pump set	- 11 - 21 - 21 - 22 - 22 - 22 - 22 - 22
Zone 1	
A) 0-5 HP	60.00
B) 5HP -7.5 HP	100.00
C) Above 7.5 HP	110.00
Zone 2	
A) 0-5 HP	15.00
B) 5HP -7.5 HP	35.00
C) Above 7.5 HP	35.00
AG Metered Pump Set	0.30
AG Metered Other	0.55
LT Industries (LT-V)	0.00
0-20 KW	0.55
Above 20 KW	0.70
Street Light (LT-VI)	0.,0
Grampanchayat A, B & C Class	
Municipal Council	0.60
Municipal corporation Area	0.70
Public Services (LT VII)	
Government Educational Institutions and Hospitals	
0-20 kW	0.60
>20-50 kW	0.65
>50 kW	0.80
Others	
0-20 kW	0.55
>20-50 kW	0.85
>50 kW	0.85
Electric Vehicle Charging Stations (LT VIII)	0.75
HT Category	
HT	1
Industry (General)	0.65
Industry (Seasonal)	0.80
Commercial	1.00
Railways/Metro/Monorail	0.65
Public Water Works (PWW) and	
Sewage Treatment Plants	0.60

Category	Z <sub>FAC</sub> for the month of January, 2025 (Rs/kWh, Rs/kVAh, Rs/HP – as Applicable)
Agricultural - Pumpsets	0.40
Agricultural - Others	0.55
Group Housing Society (Residential)	0.60
Public Services – Government Educations Institutions and Hospitals	0.75
Public Services - Others	0.85
Electric Vehicle Charging Stations	0.55
EHV	
Industry (General)	0.65
Industry (Seasonal)	0.65
Commercial	0.90
Railways/Metro/Monorail	0.45
Public Water Works (PWW) and Sewage Treatment Plants	0.55
Agricultural - Pumpsets	0.35
Group Housing Society (Residential)	0.60

