



महाराष्ट्र विद्युत नियामक आयोग Maharashtra Electricity Regulatory Commission



Ref. No. MERC/FAC/2024-25/0722

Date: 27 November, 2024

The Chairman and Managing Director
Maharashtra State Electricity Distribution Company Ltd.,
5th 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 September, 2024.

Reference: 1. MSEDCL's FAC submission dated 17 October, 2024 for prior approval of FAC for the month of September, 2024.
2. Data gaps communicated to MSEDCL vide email dated 21 October, 2024.
3. MSEDCL's response to data gaps by email dated 30 October, 2024.

Sir,

Upon vetting the FAC calculations for the month of September, 2024 as mentioned in the above reference, the Commission has accorded approval for FAC amount of Rs. 852.42 Crore. The said amount is added to the existing FAC Fund and accordingly total FAC Fund as on September, 2024 is Rs 885.40 Crore. The FAC amount of Rs 629.87 Crore is to be levied up to November, 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 September, 2024 to be recovered in December, 2024

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

The FAC fund along with carrying cost up to September, 2024 is Rs 885.40 Crore. Considering the allowed recovery of Rs 629.87 Crore, the balance amount of Rs 255.53 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 September, 2024.

ANNEXURE A

Detailed Vetting Report
Date: 27 November, 2024

PRIOR APPROVAL FOR FAC CHARGES FOR THE MONTH OF SEPTEMBER, 2024

Subject: Prior Approval of Fuel Adjustment Charges (FAC) submission of MSEDCL for the month of September, 2024.

Reference: MSEDCL's FAC submission dated 17 October, 2024 and 30 October, 2024 for prior approval of FAC for the month of September, 2024.

1. FAC submission by MSEDCL:

1.1 MSEDCL has submitted FAC submissions for the month of September, 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. 852.42 Crore. The said amount is added to the existing FAC Fund and accordingly total FAC Fund as on September, 2024 is Rs 885.40 Crore. The FAC amount of Rs 629.87 Crore is to be levied up to November, 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 September, 2024 to be recovered in December, 2024. Considering the allowed recovery of Rs 629.87 Crore, the balance amount of Rs 255.53 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.*
- *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 15th 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 September, 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:



Consumer Category	Yearly Approved by the Commission (MU)	Monthly Approved (MU)	Actual Sales
			September, 2024 (MU)
HT Category			
Industry (General)	40,970.86	3,407.45	3,172.69
Industry (Seasonal)	171.63	3.01	3.05
Commercial	2,085.56	171.31	161.74
Railways/Metro/Monorail	115.31	10.04	13.11
Public Water Works (PWW)	2,248.88	179.64	181.23
Agricultural – Pumpsets	803.74	86.66	48.02
Agricultural – Others	278.19	22.98	21.53
Group Housing Society (Residential)	235.32	19.37	20.95
Public Services – Government	359.02	29.37	32.12
Public Services – Others	900.99	75.09	75.38
Electric Vehicle Charging Stations	63.69	4.70	10.18
MSPGCL Auxiliary	398.52	60.14	31.79
Sub-total (A)	48,631.73	4,069.76	3,771.79
LT Category			
BPL	64.73	5.97	3.11
Residential	27,688.73	2,288.97	2,222.06
Non-Residential	7,273.13	614.35	584.83
Public Water Works	967.36	76.89	78.37
AG Metered (Pump-sets)	18,813.96	1,341.68	1,438.39
AG Metered (Others)	259.21	20.34	16.20
Industrial	12,671.55	1,041.48	1,115.42
Street -Lights	923.14	92.29	91.86
Public Services	789.73	65.39	76.27
Electric Vehicle Charging Stations	2.55	0.18	1.38
Sub-total (B)	69,454.09	5,547.53	5,627.89
Total – Metered (C = A+B)	1,18,085.82	9,617.29	9,399.68
Unmetered Sale (D)	8,719.33	598.46	787.59
Grand Total(C+D)	1,26,805.15	10,215.76	10,187.27

3.2 For the month of September, 2024, it is observed that actual sales of 10,187.27 MU is marginally lower as compared to the approved energy sales of 10,215.76 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 September, 2024. As per the data, the billing of about 97.41% of sales is undertaken as per actual meter readings and balance 2.59% 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 September, 2024.

- 3.4 The number of actual and estimated meter readings undertaken by MSEDCL for the month of September, 2024 except for agriculture consumers are as given below:

Sr. No.	Particulars	No. of Meters for which <u>actual</u> meter reading is done either manually or through AMR	No. of Meters for which meter reading are <u>estimated</u> .	Total Meters
1	HT	23692	0	23692
2	LT	23961591	2574585	26536176
	Total	23985283	2574585	26559868

- 3.5 Further, comparison of sales for April to September 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
April-23 to September-23	13711	22740	27101	4822	68374
April-24 to September-24	14749	21175	23777	5026	64726

- 3.6 The Commission observes that overall sales in September, 2024 has decreased as compared to September, 2023 due to decrease in HT/LT Other Sales.

- 3.7 MSEDCL has considered agriculture sales are estimated based on consumption norms as per Tariff Order and consumption obtained for 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 August, 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 September, 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:

Particulars	Metered			Unmetered			Total		
	Sale in MU's	Cumulative Load (HP)	Consumption / HP - Units	Sale in MU's	Cumulative Load (HP)	Consumption / HP - Units	Sale in MU's	Cumulative Load (HP)	Consumption / HP - Units
MSEDCL - April 24-Sep 24	9138	93136308	98	5026	51745377	97	14164	144881685	98
As Approved - April 24 - Sep 24	8930	93136308	96	4708	51745377	91	13638	144881685	94

3.8 Based on the agriculture sales approved in the above table, the Commission has restricted 108.99 MU of metered agriculture sales and 87.03 MU of unmetered agriculture sales for the month of September, 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:



Sr. No.	Particular	Compliance			
1	Sources of approved Power Purchase	MSEDCL has purchased power from approved sources. In addition, power is procured on power exchange to optimise the power purchase cost			
2	Merit Order Dispatch	MSEDCL has followed merit order for scheduling of power and preference was given to cheapest power.			
3	Fuel Utilization Plan	Usage of coal is not as per approved Fuel Utilisation Plan (Detailed Explanation given below – Para 5.8 and Para 5.9)			
4	Deviation Quantum	MSEDCL has underdrawn (56.48 MU) from the actual schedule			
5	Sale of Surplus Power	There is no sale of power by MSEDCL in September 2024.			
6	Power Purchase	Actual Net Power Purchase is 12221.05 MU as against approved 12101.75 MU.			
7	Source wise Power Purchase	Source Name	Approved (MU)	Actual (MU)	Proportion of each Source in Actual Purchase
		MSPGCL	4,889.21	4,322.65	35%
		NTPC	2,118.33	2,881.14	24%
		IPP	2,126.81	2,643.23	22%
		Renewable	2,290.49	1,538.43	13%
		Must Run	585.91	873.12	7%
		Short Term	0.00	18.97	0%
		Sale of Power	0.00	-	0%
		DSM	0.00	-56.48	0%
Total	12,010.75	12,221.05	100%		
8	Power Purchase: a. Section 62 of Electricity Act, 2003	<p>A. MSPGCL</p> <p>As part of verification of fixed cost claimed by MSEDCL, the same has been verified from the MTR Order in Case No. 226 of 2022 and invoice submitted by MSEDCL.</p> <p>As part of verification of energy charges claimed by MSEDCL, verification of operational parameters, fuel cost, GCV etc. vis-à-vis the MYT Order/Tariff Regulations is carried out and invoice submitted by MSEDCL.</p> <p>B. CGS- NTPC etc</p> <p>Cost and MUs are verified as per invoice</p>			



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 18.97 MU at Rs 5.55/kWh in Short Term Bilateral Market.

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

Particulars	Tariff Order Dated 31.03.2022 Approved for September, 2024			Actual for September, 2024 as submitted by MSEDCL			Variation		
	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
MSPGCL – Thermal	4,473.98	2,443.43	5.46	4,002.96	2,282.97	5.70	(471.03)	(160.46)	0.24
MSPGCL-Hydro	415.23	69.65	1.68	319.69	64.28	2.01	(95.54)	(5.37)	0.33
NTPC	2,118.33	883.31	4.17	2,881.14	1,365.54	4.74	762.81	482.23	0.57
1.JSW	0.00	16.05	#DIV/0!	181.51	86.04	4.74	181.51	69.99	#DIV/0!
2.Mundra UMPP	384.51	223.54	5.81	9.94	5.29	5.32	(374.58)	(218.25)	(0.49)
3.Adani Power	826.86	524.47	6.34	1,684.31	1,130.47	6.71	857.45	606.00	0.37
4.Emco	112.61	45.83	4.07	136.02	119.48	8.78	23.41	73.65	4.71
5.Rattan India	675.65	278.27	4.12	484.09	189.08	3.91	(191.56)	(89.19)	(0.21)
6.Sai Wardha	127.18	62.37	4.90	147.37	63.33	4.30	20.19	0.96	(0.61)
Total IPPs (1 to 6)	2,126.81	1,150.53	5.41	2,643.23	1,593.68	6.03	516.42	443.15	0.62
7.Non-Solar	1,003.85	496.55	4.95	826.97	348.68	4.22	(176.88)	(147.87)	(0.73)
8.Solar	1,286.63	435.12	3.38	711.46	240.55	3.38	(575.18)	(194.57)	(0.00)
Renewable Energy	2,290.49	931.67	4.07	1,538.43	589.22	3.83	(752.06)	(342.45)	(0.24)



Particulars	Tariff Order Dated 31.03.2022 Approved for September, 2024			Actual for September, 2024 as submitted by MSEDCL			Variation		
	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	585.91	186.47	3.18	873.12	283.04	3.24	287.20	96.57	0.06
Short Term	0.00	0.00		18.97	74.35	39.20	18.97	74.35	39.20
Sale of Power	0.00	0.00		-	-	-	-	-	-
DSM	0.00	0.00		-56.48	7.27	-1.29	(56.48)	7.27	(1.29)
PGCIL	0.00	336.44		-	222.93		-	(113.51)	-
Total	12,010.75	6,001.49	5.00	12,221.05	6,954.27	5.69	210.30	952.78	0.69

4.3 Thus, for the month of September, 2024, total variation in power purchase cost is Rs. 952.78 Crore, out of which Rs. 105.08 Crore was on account of higher quantum (210.30 MU) of power purchase and Rs. 847.70 Crore was on account of higher rate of average power purchase by Rs. 0.69/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.

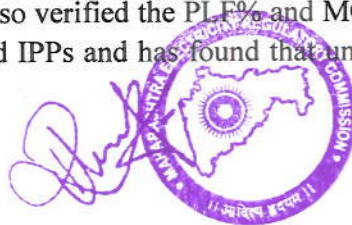
5. Power Purchase Cost

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 September, 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.

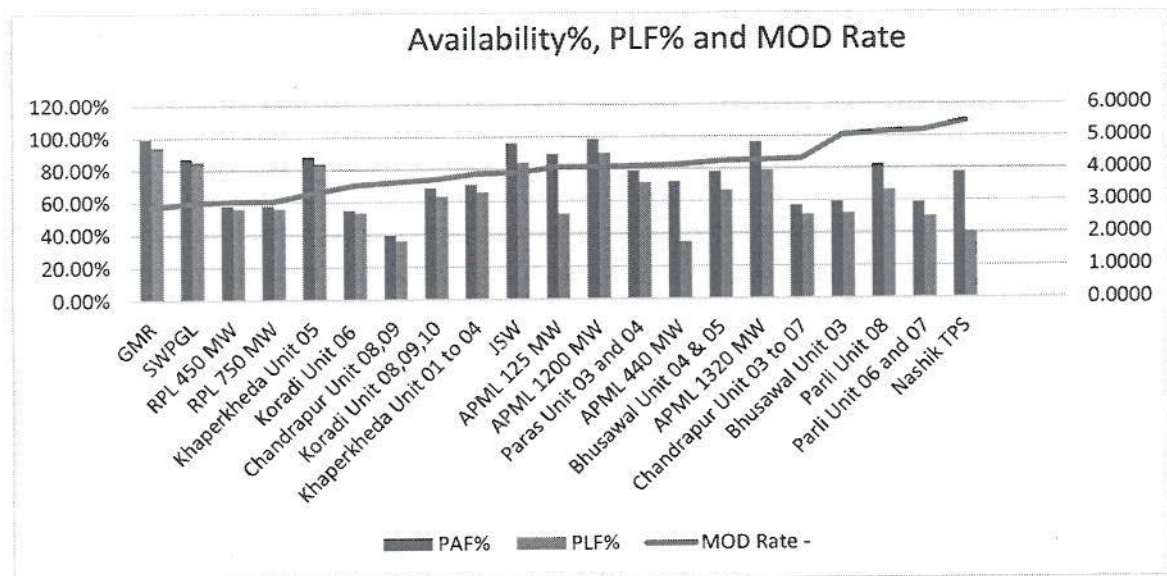
5.2 It was observed that due to planned/forced outages during the month, the availability of some of the MSPGCL and IPP generating stations was lower than normative availability.

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 that units 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 16 September, 2024 to 25 September, 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 September, 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.

Particulars	Approved for September, 2024						Actual for September, 2024						Variations			
	Quantum	VC	VC	FC	FC	APPC	Quantum	VC	VC	FC	FC	APPC	Quantum	VC	FC	APPC
	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	4,473.98	3.76	1,682.23	761.20	1.70	5.46	4,002.96	4.05	1,619.24	663.73	1.66	5.70	(471.03)	0.29	(0.04)	0.24

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



- 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 Chandrapur3-7, 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 September, 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:
- 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.
 - 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 10 October, 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	5.052	0.591	13.25%
Bhusawal Unit 04 & 05	3.746	4.382	0.636	16.98%
Khaperkheda Unit 1 to 4	4.218	3.283	-0.935	-22.17%
Khaperkheda Unit 05	4.019	3.254	-0.765	-19.03%
Nashik TPS	4.641	5.466	0.825	17.78%
Chandrapur Unit 03 to 07	4.097	4.295	0.198	4.83%
Chandrapur Unit 08,09	3.442	3.609	0.167	4.85%
Paras Unit 03 and 04	3.510	4.242	0.732	20.85%
Parli Unit 06 and 07	5.096	5.208	0.112	2.20%
Parli Unit 08	5.052	5.194	0.142	2.81%



Power Station	Approved Energy Charge Rs/kWh	Actual Energy Charge Rs/kWh	Difference Rs/kWh	Difference %
Koradi Unit 06	3.368	3.600	0.232	6.89%
Koradi Unit 08,09,10	3.119	3.338	0.219	7.02%
GTPS Uran	6.760	5.252	-1.508	-22.31%

5.12 The Commission notes that for the month of September, 2024, Energy Charge of all stations have increased except for Khaperkheda 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. In response to query raised by the Commission in respect of power supplied by MSPGCL under short term from 22 September, 2024 to 30 September, 2024, MSEDCL submitted that most of the MSPGCL's stations were not operating at full availability and due to restrictions imposed on MSEDCL, on account of LPS Rules, there was restriction on short-term power purchase from market in September, 2024. Thus, to cater the demand and cope-up with the shortfall in generation-supply gap, MSPGCL was requested to declare availability at the fullest by making alternate arrangement under Section 11 of EA, 2003. Accordingly, MSPGCL provided power through short term purchase. The Commission notes that MSPGCL was issued directions under Section 11 of EA 2003 in public interest to meet the increasing demand of the State by increasing Availability and running plants at full capacity and also procure power from alternate source in case of insufficient coal or any forced outage of the Plant. It is observed that MSPGCL has purchased power from IEX in Day Ahead and Real Time Market and supplied to MSEDCL. Accordingly, the Commission has considered the said cost of power purchase from IEX.

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 September, 2024, IEPL has supplied 124.12 MU at Rs 3.49/kWh. The Commission has accordingly considered the said purchase of 124.12 MU for Rs 43.37 Crore at Rs 3.49/kWh.

5.14 Considering the overall cost of MSPGCL thermal/gas stations, the average power purchase cost is Rs. 5.70/kWh as against Rs. 5.46/kWh approved in the Tariff Order. The average power purchase cost is higher due to higher variable cost by Rs 0.29/kWh which is offset by lower fixed cost by Rs (0.04)/kWh.

5.15 Variation in power purchase expenses from MSPGCL can be divided on account of change in quantum and per unit rate as follows:



Month	Increase in Expenses for power purchase from MSPGCL (Rs. Crore)		
	On Account of change Quantum of Power Purchase	On Account of change in Per Unit rate of Power Purchase	Total
September, 2024	(257.25)	96.78	(160.46)

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 2881.14 MU of power from NTPC's stations as compared to approved MoD stack of 2118.33 MU during the month of September, 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 September, 2024.

Particulars	Approved for September, 2024						Actual for September, 2024						Variations			
	Quantum	VC	VC	FC	FC	APP C	Quantum	VC	VC	FC	FC	AP PC	Quantum	VC	FC	APPC
	MU	Rs./kWh	Rs. Crore	Rs. Crore	Rs./kWh	Rs./kWh	MU	Rs./kWh	Rs. Crore	Rs. Crore	Rs./kWh	Rs./kWh	MU	Rs./kWh	Rs./kWh	Rs./kWh
NTPC	2,118.33	2.05	433.60	449.71	2.12	4.17	2,881.14	3.11	897.45	468.09	1.62	4.74	762.81	1.07	(0.50)	0.57

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 is raised by NTPC as per the said Order. Further, MSEDCL has also claimed Rs 471 Crore paid to RGPPL as per CERC order dated 30 September 2024 in IA No 67 of 2024 in Case No 276 of 2024. Accordingly, the Commission has considered the said amount paid by MSEDCL as per Order of the Hon'ble CERC. 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:

Month	Increase in Expenses for power purchase from NTPC (Rs. Crore)		
	On Account of change Quantum of Power Purchase	On Account of increased Per Unit rate of Power Purchase	Total
September, 2024	318.08	164.15	482.23



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 Vendor – Rs Cr			As per MSEDCL – Rs Cr		
	CIL	Shakti	Total	CIL	Shakti	Total
JSW	-	-	-	-	-	-
CGPL	-	-	-	-	-	-
APL 125 MW	3.33	12.73	16.05	1.98	12.73	14.71
APL 1320 MW	34.50	153.54	188.04	34.44	153.54	187.98
APL 1200 MW	31.92	122.20	154.12	32.46	122.20	154.66
APL 440 MW	6.77	25.90	32.66	4.67	25.90	30.57
GMR	6.97	5.74	12.70	6.97	5.74	12.70
RIPL 450 MW	10.88	-	10.88	8.53	-	8.53



IPP	As per Vendor – Rs Cr			As per MSEDCL – Rs Cr		
	CIL	Shakti	Total	CIL	Shakti	Total
RIPL 750 MW	18.13	-	18.13	14.21	-	14.21
Sai Wardha	6.06	-	6.06	6.06	-	6.06
Total	118.55	320.09	438.64	109.32	320.09	429.41

5.24 The Commission notes that MSEDCL has also submitted claim of Rs 199.86 Crore towards Change in Law of APL as per Order dated 19 September, 2024 in Case No 84 of 2023 and also after reconciliation of Change in Law amount with APL. Further, MSEDCL has also claimed Change in Law amount of Rs 61.99 Crore as compensation towards coal shortfall as per order dated 17, May 2024 of the CERC in Case No 25 of 2020 and Rs 11.63 Crore towards Forest Cess as per Order dated 18 June, 2024 of this Commission in Case No 86 of 2023. The same has been considered by the Commission in FAC computation for the current month. Further, the Commission notes that MSEDCL has been claiming Change in Law claim of SWPGPL in respect of blending of open market coal. In respect of query raised by the Commission in respect of approval of the Commission in respect of the said claim, MSEDCL submitted that RattanIndia Power Limited filed Case No. 144 of 2021 seeking a declaration of its entitlement to procure coal from alternate sources, including imported coal, in the event of a shortfall in domestic coal supply under the Fuel Supply Agreement (FSA), after notifying MSEDCL. The Commission in its Order dated 07 June 2022, addressed whether it was necessary for the Commission to prescribe a specific methodology for the automatic pass-through of Change in Law impacts, as per the Ministry of Power (MoP) notification dated 9 November 2021. The Commission in the said order has held that it has already put in place FAC mechanism which allows generators to pass on variation in fuel cost and other expenses including change in law compensation on monthly basis to Distribution Licensee and in turn Distribution Licensee is allowed to pass it on to consumers on monthly basis subject to adjustment against any FAC stabilization fund. MSEDCL also submitted that the issue of coal shortfall has been conclusively resolved by the Hon. Supreme Court in its Judgments in Civil Appeal No. 1805 of 2021 (dated 27.03.2023) and Civil Appeal No. 684 of 2021 (Adani Matter, dated 03.03.2023), thus settling the legal position on alternate coal procurement. However, the Commission notes that having such mechanism in place for pass through for recovering of Change in Law does not entitle MSEDCL to claim such cost without approval of specific Change in Law event. Once Commission approves the Change in Law as per provisions of the PPA with SWPGPL, the invoice raised by SWPGPL can be claimed under FAC mechanism. The Commission further notes that SWPGPL has been claiming amount towards Change in Law for Blending Open Market coal to enhance the Availability of Contracted Capacity. However, the Commission notes the submission of SWPGPL itself in its Order dated 12 November, 2020 in Case No 195 of 2020 as given herein below:

80. Having ruled as above, the Commission also notes that SWPGL in its Petition has stated that it will file Change in Law Petition relating to coal shortage separately.



Accordingly, the Commission directs MSEDCL to take appropriate action/steps seeking approval of the Commission for Change in Law claim of SWPGPL in respect of blending of open market coal. Thus, on an overall basis, the average power purchase cost from IPPs stands at Rs. 6.03/kWh as compared to monthly approved rate of Rs. 5.41/kWh for the month of September, 2024. The said cost is being considered for the FAC computation based on the scrutiny of invoices and details submitted by MSEDCL.

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 September, 2024.

Particulars	Approved for September, 2024						Actual for September, 2024						Variations				
	Quantum	VC	VC	FC	FC	APP C	Quantum	VC	VC	FC	FC	APPC	Quantum	VC	FC	APPC	
	MU	Rs./kWh	Rs. Crore	Rs. Crore	Rs./kWh	Rs./kWh	MU	Rs./kWh	Rs. Crore	Rs. Crore	Rs./kWh	Rs./kWh	MU	Rs./kWh	Rs./kWh	Rs./kWh	
1.JSW	-	-	-	16.05	-	-	181.51	3.89	70.61	15.43	0.85	4.74	181.51	-	-	-	-
2.Mundra UMPP	384.51	4.77	183.31	40.23	1.05	5.81	9.94	3.78	3.76	1.53	1.54	5.32	(374.58)	(0.98)	0.49	(0.49)	
3.Adani Power	826.86	3.97	328.13	196.34	2.37	6.34	1,684.31	5.57	937.56	192.91	1.15	6.71	857.45	1.60	(1.23)	0.37	
4.Emco	112.61	2.77	31.23	14.61	1.30	4.07	136.02	7.58	103.08	16.41	1.21	8.78	23.41	4.81	(0.09)	4.71	
5.Rattan India	675.65	3.26	220.56	57.71	0.85	4.12	484.09	3.10	150.15	38.92	0.80	3.91	(191.56)	(0.16)	(0.05)	(0.21)	
6. Sai Wardha	127.18	3.33	42.32	20.04	1.58	4.90	147.37	2.96	43.56	19.77	1.34	4.30	20.19	(0.37)	(0.23)	(0.61)	
Total IPPs (1 to 6)	2,126.81	3.79	805.55	344.98	1.62	5.41	2,643.23	4.95	1,308.71	284.97	1.08	6.03	516.42	1.16	(0.54)	0.62	

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:

Month	Increase in Expenses for power purchase from IPP (Rs. Crore)		
	On Account of change Quantum of Power Purchase	On Account of increased Per Unit rate of Power Purchase	Total
September, 2024	279.37	163.78	443.15

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 18.97 MU at average rate of Rs. 5.55/kWh for September, 2024. In response to query raised by the Commission, MSEDCL has purchased short term power from JPL Shirpur Plant considering the emergent situation to prevent the load shedding and in view of the grid stability. As per Regulation 22.5 of MYT Regulations, 2019, Distribution Licensee may enter into a short-term arrangement or agreement for procurement of power without the prior approval of the Commission when faced with emergency conditions that threaten the stability of the distribution system, or when



directed to do so by the MSLDC to prevent grid failure. Further as per the Regulations, the details of power procurement under this case needs to be submitted to the Commission. Accordingly, MSEDCL has submitted the details to the Commission. The Commission has considered the said purchase in FAC computation of September, 2024. The Commission has also raised query in respect of Rs. 63.82 Crore paid towards compensation of Short-Term power purchase and asked MSEDCL to submit the cost benefit analysis in respect of said compensation paid. MSEDCL submitted that it has issued LOA to the successful bidders with the rates in the range of Rs.7.35 per unit to 8.50 per unit for short term purchase from March 24 to May 24 and the same was approved by the Commission in its Order dated 22 November, 2023 in Case No 190/AP/2023 and vide order dated 12 March, 2024 in Case No 04/AP/2024. In the months of March-24 to May-24, there was intermittent unseasonal rainfall across the Maharashtra which lead to decrease in MSEDCL's demand. In these months, the peak demand expected was around @ 26500 MW, however the actual peak demand was only around 24700 MW which is around 2000 MW less that the expected demand. Further in these months wind generation was on higher side which was in the range of 1000 MW to 3000 MW. Further, due to the reduction of demand across India, the rates in the power exchanges were also on the lower side and were in the range of Rs. 4.10 per unit to Rs. 5.10 per unit. Thus considering the demand-supply position, MSEDCL surrendered the short term power and the same was procured through exchanges as and when feasible. As per tender terms and conditions, there is provision of liquidated damages (20% of Tariff) for failure in scheduling below 85% energy from procurer side. As MSEDCL has surrendered the power below 85% of contracted capacity, MSEDCL is liable for payment of liquidated damages as per the tender terms and conditions. However, in-spite of paying the compensation for surrendered power to bidder, MSEDCL by procuring power in market and picking up the contracted generators against the surrendered power has saved the energy cost of the surrendered power. The details are as given below:

Month	Scheduled Energy (MUs)	Scheduled Energy Amt. (Cr.)	Surrender Energy (MUs)	Cost of Surrender MUs as per LOA (Cr.)	Replacement Cost of Un-scheduled MUs (IEX/Generation Pick Up) Crs.	Compensation towards Surrender Power (Cr.)	Saving Accrued (Rs. Cr.)
	A	B	C	D	E	F	G=D-(E+F)
Mar-23	408.21	312.02	235.33	181.91	88.67	33.77	59.47
Apr-23	284.72	225.63	47.34	37.51	22.28	2.69	12.54
May-23	145.56	114.26	178.29	141.58	77.96	27.39	36.24
Total	838.49	651.92	460.96	361.01	188.91	63.85	108.25

In view of the aforesaid submission of MSEDCL and net savings accrued to the Consumer, the Commission has considered the compensation of Rs 63.85 Crore paid by MSEDCL. However, the Commission directs MSEDCL to make detailed submission in respect of the said claim in the ensuing tariff Petition to be filed as per MYT Regulations, 2024.



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:

Particulars	Approved for September, 2024						Actual for September, 2024						Variations			
	Quantum	VC	VC	FC	FC	APPC	Quantum	VC	VC	FC	FC	APPC	Quantum	VC	FC	APPC
	MU	Rs./kWh	Rs. Crore	Rs. Crore	Rs./kWh	Rs./kWh	MU	Rs./kWh	Rs. Crore	Rs. Crore	Rs./kWh	Rs./kWh	MU	Rs./kWh	Rs./kWh	Rs./kWh
MSPGCL-Hydro*	4,473.98	3.76	1,682.23	761.20	1.70	5.46	4,002.96	4.05	1,619.24	663.73	1.66	5.70	(471.03)	0.29	(0.04)	0.24
MSPGCL-Hydro Lease rent				43.80						41.52						
1.Non-Solar	1,003.85	4.95	496.55	-	-	4.95	826.97	4.17	344.44	4.24	0.05	4.22	(176.88)	(0.78)	0.05	(0.73)
2.Solar	1,286.63	3.38	435.12	-	-	3.38	711.46	3.38	240.55	-	-	3.38	(575.18)	(0.00)	-	(0.00)
Renewable Energy including REC (1 to 2)	2,290.49	4.07	931.67	-	-	4.07	1,538.43	3.80	584.98	4.24	0.03	3.83	(752.06)	(0.27)	0.03	(0.24)
Others-KAPP, TAPP, Dodson etc	585.91	3.15	184.44	2.02	0.03	3.18	873.12	3.22	281.01	2.02	0.02	3.24	287.20	0.07	(0.01)	0.06

*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 319.69 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 415.23 MU approved by the Commission.

5.31 It is observed that Solar and Non-Solar energy purchased in September, 2024 i.e., 1538.43 MU was lower than approved i.e., 2290.49 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 September, 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. 222.93 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 not sold power in September, 2024.

Deviation Quantum and Cost

5.34 MSEDCL has submitted that the deviation quantum (under drawl) of 56.48 MU. As per invoice raised by MSLDC, the quantum is 56.48 MU and corresponding amount payable is Rs. 7.27 Crore. The Commission notes that DSM charges considered are for the month as a whole wherein DSM payable is higher than DSM receivable during the month whereas quantum of under drawl is more than over drawl. Accordingly, the Commission has considered the said Deviation quantum and cost in the FAC computation for the month of September, 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 September, 2024 considered by the Commission is as shown below:

Particulars	Approved for September, 2024						Actual for September, 2024						Variations			
	Quantum	VC	VC	FC	FC	APPC	Quantum	VC	VC	FC	FC	APPC	Quantum	VC	FC	APPC
	MU	Rs./kWh	Rs. Crore	Rs. Crore	Rs./kWh	Rs./kWh	MU	Rs./kWh	Rs. Crore	Rs. Crore	Rs./kWh	Rs./kWh	MU	Rs./kWh	Rs./kWh	Rs./kWh
MSPGC L - Thermal	4,473.98	3.76	1,682.23	761.20	1.70	5.46	4,002.96	4.05	1,619.24	663.73	1.66	5.70	(471.03)	0.29	(0.04)	0.24
MSPGC L-Hydro	415.23	-	-	25.85	0.62	0.62	319.69	0.25	7.98	14.79	0.46	0.71	(95.54)	0.25	(0.16)	0.09
MSPGC L-Hydro Lease Rent	-	-	-	43.80	-	-	-	-	-	41.52	-	-	-	-	-	-
NTPC	2,118.33	2.05	433.60	449.71	2.12	4.17	2,881.14	3.11	897.45	468.09	1.62	4.74	762.81	1.07	(0.50)	0.57
IPPs	2,126.81	3.79	805.55	344.98	1.62	5.41	2,643.23	4.95	1,308.71	284.97	1.08	6.03	516.42	1.16	(0.54)	0.62
RE including REC	2,290.49	4.07	931.67	-	-	4.07	1,538.43	3.80	584.98	4.24	0.03	3.83	(752.06)	(0.27)	0.03	(0.24)
Must Run - KAPP, TAPP, Dodson etc	585.91	3.15	184.44	2.02	0.03	3.18	873.12	3.22	281.01	2.02	0.02	3.24	287.20	0.07	(0.01)	0.06
Short Term	-	-	-	-	-	-	18.97	39.20	74.35	-	-	39.20	18.97	-	-	-
Sale of Power	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DSM	-	-	-	-	-	-	(56.48)	(1.29)	7.27	-	-	(1.29)	(56.48)	-	-	-



Particulars	Approved for September, 2024						Actual for September, 2024						Variations			
	Quantum	VC	VC	FC	FC	APP C	Quantum	VC	VC	FC	FC	AP PC	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./ kWh	MU	Rs./k Wh	Rs./k Wh	Rs./kWh
PGCIL	-	-	-	336.44	-	-	-	-	-	222.93	-	-	-	-	-	-
Total	12,010.75	3.36	4,037.49	1,964.01	1.64	5.00	12,221.05	3.91	4,780.99	2,173.29	1.78	5.69	210.30	0.55	0.14	0.69

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. The cost is also higher due to payment of Rs 471 Crore to RGPPL as per CERC's Order and Change in Law claim considered for APL, GMR and RPL.

5.37 Considering the above, the Commission allows the average power purchase cost of Rs. 5.69/kWh for the month of September, 2024 as against Rs. 5.00/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 September, 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_{FAC} is to be passed on to the consumers.

6.2 The following table shows the Z_{FAC} worked out by the Commission on account of difference in fuel and power purchase cost for the month of September, 2024.

S. No.	Particulars	Units	September, 2024
1	Average power purchase cost approved by the Commission	Rs. /kWh	5.00
2	Actual average power purchase cost	Rs. /kWh	5.69
3	Change in average power purchase cost (=2 -1)	Rs. /kWh	0.69
4	Net Power Purchase	MU	12,221.05
5	Change in fuel and power purchase cost (=3 x 4/10)	Rs. Crore	847.70

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. 516.01 Crore for the month of September, 2024 as against approved amount of Rs. 629.87 Crore. Thus, the adjustment factor to be considered towards under recovery is Rs. 113.86 Crore while



computing the allowable FAC for September, 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 September, 2024:

S. No.	Particulars	Units	September-24
1	Adjustment factor for over-recovery/under-recovery	Rs. Crore	113.86
2	Interest rate	%	10.45%
3	Holding/Carrying cost for (over-recovery)/under-recovery	Rs. Crore	0.99

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.

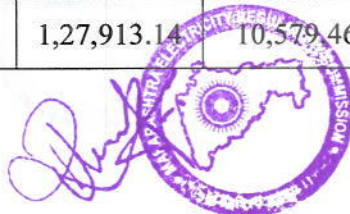
“10.8 The total Z_{FAC} recoverable as per the formula specified above shall be recovered from the actual sales in terms of “Rupees per kilowatt-hour”:

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 September, 2024	Actual – cumulative up to September, 2024	Annual Sliding Distribution Loss – October, 23 to September, 24
1	Net Energy Input at Distribution Voltage	MU	1,27,913.14	10,579.46	69,499.60	143939.31



S. N	Particulars	Units	Approved in Tariff Order	Actual for September, 2024	Actual – cumulative up to September, 2024	Annual Sliding Distribution Loss – October, 23 to September, 24
2	MSEDCL Metered Sales (excluding sales at EHV level)	MU	1,03,900.40	8,256.27	52,708.35	100945.51
3	Estimated Consumption of unmetered Sales	MU	8,719.33	700.56	4,708.09	10168.19
4	Distribution Loss (1-2-3)	MU	15,293.41	1,622.64	12,083.17	32825.61
5	Distribution Loss as % of net energy input (4/1)	%	12.00%	15.34%	17.39%	22.81%
6	Excess Distribution Loss = [Actual Distribution Loss (5) - Distribution loss approved] x Net Energy Input (1)	MU	-	-	-	1,143.13
7	Disallowance of FAC due to excess Distribution Loss	Rs. Crore	-	-	-	110.13

9.3 As seen from the above table, the standalone distribution loss for the month of September, 2024 is higher at 15.34% as against approved loss of 12%. The standalone loss for September, 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 September, 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%
Cumulative up to September	17.39%	22.90%



9.5 Since Annual Sliding Distribution Loss of 22.81% is higher than the approved loss of 12%, the Commission has worked out disallowance of Rs 110.13 Crore on account of excess Distribution Loss for the month of September, 2024.

10. Summary of Allowable Z_{FAC}

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

S. No.	Particulars	Units	September, 2024-As submitted	September, 2024- As Approved
1	Calculation of Z_{FAC}			
1.1	Change in cost of generation and power purchase attributable to Sales within the License Area (F)	Rs. Crore	847.70	847.70
1.2	Carrying cost for over-recovery/under-recovery (C)	Rs. Crore	0.99	0.99
1.3	Adjustment factor for over-recovery/under-recovery (B)	Rs. Crore	113.86	113.86
1.4	Z_{FAC} = F+C+B	Rs. Crore	962.55	962.55
2	Calculation of Per Unit FAC			
2.1	Energy Sales within the License Area	MU	10,155.48	9,991.26*
2.2	Excess Distribution Loss	MU	1,128.69	1,143.13
2.3	Z _{FAC} per kWh	Rs. /kWh	0.95	0.96
3	Allowable FAC			
3.1	FAC disallowed corresponding to excess Distribution Loss [(2.2 x 2.3)/10]	Rs. Crore	10.84	110.13
3.2	FAC allowable [1.4-3.1]	Rs. Crore	984.69	852.42
4	Utilization of FAC Fund			
4.1	Opening Balance of FAC Fund	Rs. Crore	32.70	32.70
4.2	Carrying Cost/(Holding Cost) on FAC Fund	Rs. Crore	0.28	0.28
4.3	Z _{FAC} for the month (Sr. N. 3.2)	Rs. Crore	951.70	852.42
4.4	Closing Balance of FAC Fund	Rs. Crore	984.69	885.40
4.5	Z _{FAC} leviable/(refundable) to consumer	Rs. Crore	984.69	885.40
5	Total FAC based on category wise and slab wise allowed to be recovered	Rs. Crore	984.69	629.87

*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. 852.42 Crore for the month of September, 2024 to be added to the FAC Fund of Rs 32.70 Crore as on August, 2024. Thus, the closing balance of FAC fund as on September, 2024 including carrying cost is Rs. 885.40 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 November, 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 September, 2024 in December, 2024. The FAC fund along with carrying cost up to September, 2024 is Rs 885.40 Crore. Considering the allowed



recovery of Rs 629.87 Crore, the balance amount of Rs 255.53 Crore is being carried forward to next FAC billing cycle.

- 11.4 In a view of above, the per unit Z_{FAC} for the month of September, 2024 to be levied on consumers of MSEDCL in the billing month of December, 2024 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 _{FAC} for the month of December, 2024 (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
Public Water Works (LT-III)	
0-20 kW	0.35
20-40 kW	0.50
Above 40 kW	0.60
Agriculture (LT-IV)	
AG unmetered Pump set	
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)	
0-20 KW	0.55
Above 20 KW	0.70
Street Light (LT-VI)	
Grampanchayat A, B & C Class Municipal Council	0.60
Municipal corporation Area	0.70



Category	Z _{FAC} for the month of December, 2024 (Rs/kWh, Rs/kVAh, Rs/HP – as Applicable)
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	
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
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



