



# महाराष्ट्र विद्युत नियामक आयोग

## Maharashtra Electricity Regulatory Commission

Ref. No. MERC/FAC/2023-24/0669

Date: 04 December, 2023

To,  
**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 September, 2023.

**Reference:** 1. MSEDCL's FAC submission dated 3 November, 2023 for prior approval of FAC for the month of September, 2023.  
2. Data gaps communicated to MSEDCL vide email dated 7 November, 2023 and 19 November, 2023.  
3. MSEDCL's response to data gaps by email dated 17 November, 2023 and 22 November, 2023.

Sir,

Upon vetting the FAC calculations for the month of September, 2023 as mentioned in the above reference, the Commission has accorded approval for FAC amount of Rs. 1418.08 Crore. The said amount is added to the FAC Fund along with carrying cost and total amount of Rs 1412.37 Crore is proposed to be levied in ten (10) equal instalments along with carrying cost from December, 2023 onwards in addition to Rs 238.03 Crore allowed to be recovered in FAC approval of June, 2023. Thus, the FAC chargeable to consumers is as shown in the table below:

Month	FAC Amount (Rs. Crore)
September, 2023	385.76

The monthly recovery of Rs 385.76 Crore from December, 2023 onwards for the next 10 months will be adjusted in the standalone FAC approval from October, 2023 onwards for each month and accordingly FAC will be computed and allowed to be recovered from consumers from January, 2024.

Yours faithfully,

(Dr. Rajendra G. Ambekar)  
Executive Director, MERC

**Encl:** Annexure A: Detailed Vetting Report for the month of September, 2023.

## ANNEXURE A

**Detailed Vetting Report**  
**Date: 04 December, 2023**

### **PRIOR APPROVAL FOR FAC CHARGES FOR THE MONTH OF SEPTEMBER 2023**

**Subject:** Prior Approval of Fuel Adjustment Charges (FAC) submission of MSEDCL for the month of September, 2023.

**Reference:** MSEDCL's FAC submission dated 3 November, 2023, 3 November, 2023 and 3 November, 2023 for prior approval of FAC for the month of September, 2023.

#### **1. FAC submission by MSEDCL:**

1.1 MSEDCL has submitted FAC submissions for the month of September, 2023 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. 1418.08 Crore. The said amount is added to the FAC Fund along with carrying cost and total amount of Rs 1412.37 Crore is proposed to be levied in ten (10) equal instalments along with carrying cost from December, 2023 onwards in addition to Rs 238.03 Crore allowed to be recovered in FAC approval of June, 2023. Thus, the FAC chargeable to consumers as approved in September, 2023 to be recovered in 10 months is Rs 385.76 Crore.

#### **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 True-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 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 September, 2023 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 2023 (MU)
<b>HT Category</b>			
Industry (General)	39,840.45	3,313.44	3,161.98
Industry (Seasonal)	166.90	2.92	4.43
Commercial	2,044.67	167.96	148.57
Railways/Metro/Monorail	111.81	9.74	11.56
Public Water Works (PWW)	2,204.08	176.06	177.99
Agricultural – Pumpsets	794.83	85.65	146.64
Agricultural – Others	275.43	22.75	20.53
Group Housing Society (Residential)	232.99	19.18	17.95
Public Services – Government	343.18	28.08	29.80
Public Services – Others	861.24	71.78	72.83
Electric Vehicle Charging Stations	57.90	4.27	7.35
MSPGCL Auxiliary	362.48	54.64	31.03
Other Adjustment	-	-	637.65
<b>Sub-total (A)</b>	<b>47,295.96</b>	<b>3,956.46</b>	<b>4,468.31</b>
<b>LT Category</b>			
BPL	59.53	5.49	3.25
Residential	27,102.89	2,240.54	2,109.63
Non-Residential	6,993.39	590.72	541.74
Public Water Works	930.36	73.95	75.68
AG Metered (Pump-sets)	18,444.77	1,315.35	2,183.15
AG Metered (Others)	240.95	18.91	15.97
Industrial	12,482.35	1,025.93	1,074.89
Street Lights	923.14	92.29	93.77
Public Services	760.23	62.94	71.91
Electric Vehicle Charging Stations	2.32	0.16	0.62
<b>Sub-total (B)</b>	<b>67,939.93</b>	<b>5,426.29</b>	<b>6,170.61</b>
<b>Total – Metered (C = A+B)</b>	<b>1,15,235.89</b>	<b>9,382.74</b>	<b>10,638.92</b>
Unmetered Sale (D)	8,719.30	598.46	680.04
<b>Grand Total(C+D)</b>	<b>1,23,955.19</b>	<b>9,981.20</b>	<b>11,318.96</b>

\* Other Adjustment is related to Sales to Open Access Consumer (Conventional and Renewable)

3.2 For the month of September, 2023, it is observed that actual sales of 11318.96 MU is higher as compared to the approved energy sales of 9981.20 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, 2023. As per the data, the billing of about 97.57% of sales is undertaken as per actual

meter readings and balance 2.43% 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, 2023.

3.4 The number of actual and estimated meter readings undertaken by MSEDCL for the month of September, 2023 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	23243	0	23243
2	LT	23205006	2494690	25699696
	<b>Total</b>	23228249	2494690	25722939

3.5 Further, comparison of sales for April, 2023 to September, 2023 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-22	2241	3281	4262	779	10563
May-23	2399	4356	4622	898	12275
May-22	2522	3334	4453	779	11088
June-23	2728	4281	4492	858	12359
June-22	2577	3977	4229	1059	11842
July-23	2317	3180	4483	708	10688
July-22	2135	3219	4184	786	10323
August-23	2058	3249	4590	743	10640
August-22	1964	3212	4170	786	10132
September-23	2110	4061	4468	680	11319
September-22	2000	3242	4054	786	10083
April 23 to September 23	<b>13711</b>	<b>22740</b>	<b>27101</b>	<b>4822</b>	<b>68374</b>
April 22 to September 22	<b>13439</b>	<b>20265</b>	<b>25352</b>	<b>4975</b>	<b>64031</b>

3.6 The Commission observes that overall sales in September, 2023 has increased as compared to September, 2022 due to increase in sales across all categories except

Agriculture.

- 3.7 MSEDCL has considered agriculture sales are estimated based on consumption norms as per Tariff Order and consumption obtained for FY 2023-24 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, 2023 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, 2023. 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 23-Sep 23	11271	91788227	123	4822	50615510	95	16093	142403737	113
As Approved – April 23 - Sep 23	8883	91788227	97	4589	50615510	91	13472	142403737	95

- 3.8 Based on the agriculture sales approved in the above table, the Commission has restricted 875.15 MU of metered agriculture sales for the month of September, 2023 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.
- MSPGCL
  - Central Generating Stations i.e., NTPC, TAPP etc.
  - IPPs i.e., JSW, Adani Power, Mundra UMPP, Emco, Rattan India and Sai Wardha
  - 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 (211.28 MU) from the actual schedule			
5	Sale of Surplus Power	MSEDCL has sold 6.08 MU at Rs 8.36/kWh during the month. 53.15 MU was returned to PSPCL towards banking.			
6	Power Purchase	Actual Net Power Purchase is 12759.89 MU as against approved 11863.49 MU.			
7	Source wise Power Purchase	<b>Source Name</b>	<b>Approved (MU)</b>	<b>Actual (MU)</b>	<b>Proportion of each Source in Actual Purchase</b>
		MSPGCL	4,889.21	3,939.27	31%
		NTPC	2,350.96	3,387.68	27%
		IPP	2,081.15	3,199.36	25%
		Renewable	1,999.02	1,481.00	12%
		Must Run	543.15	519.23	4%
		Short Term	0.00	503.84	4%
		Sale of Power	0.00	-59.22	0%
		DSM	0.00	-211.28	-2%
<b>Total</b>	<b>11,863.49</b>	<b>12,759.89</b>	<b>100%</b>		
8	Power Purchase: a. Section 62 of Electricity Act, 2003	<p><b>A. MSPGCL</b></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>B. CGS- NTPC etc</b></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	Short-term power purchase invoices of September, 2023 are submitted by MSEDCL. All the power purchase quantum and rate are verified from the invoices and has been considered for FAC calculation.

4.2 The following table show the variation in average power purchase cost (Rs/kWh) for the month of September, 2023 submitted by MSEDCL as compared to average power purchase cost approved in Tariff Order:

Particulars	Tariff Order Dated 31.03.2022 Approved for September, 2023			Actual for September, 2023 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	2,398.94	5.36	3,714.38	1,920.70	5.17	(759.60)	(478.24)	(0.19)
MSPGCL-Hydro	415.23	66.30	1.60	224.89	60.43	2.69	(190.34)	(5.88)	1.09
NTPC	2,350.96	973.06	4.14	3,387.68	1,271.90	3.75	1,036.72	298.83	(0.38)
1.JSW	0.00	13.72	-	145.56	66.20	4.55	145.56	52.47	-
2.Mundra UMPP	338.86	197.93	5.84	411.82	189.08	4.59	72.97	(8.85)	(1.25)
3.Adani Power	826.86	535.36	6.47	1,680.66	2,623.85	15.61	853.80	2,088.49	9.14
4.Emco	112.61	45.41	4.03	117.28	57.80	4.93	4.67	12.39	0.90
5.Rattan India	675.65	273.05	4.04	677.12	242.52	3.58	1.48	(30.53)	(0.46)
6.Sai Wardha	127.18	61.69	4.85	166.92	69.50	4.16	39.74	7.81	(0.69)
<b>Total IPPs (1 to 6)</b>	<b>2,081.15</b>	<b>1,127.15</b>	<b>5.42</b>	<b>3,199.36</b>	<b>3,248.94</b>	<b>10.15</b>	<b>1,118.21</b>	<b>2,121.79</b>	<b>4.74</b>
7.Non-Solar	1,010.62	511.05	5.06	786.80	364.27	4.63	(223.81)	(146.78)	(0.43)
8.Solar	988.40	340.32	3.44	694.20	244.39	3.52	(294.20)	(95.93)	0.08
<b>Renewable Energy</b>	<b>1,999.02</b>	<b>851.37</b>	<b>4.26</b>	<b>1,481.00</b>	<b>608.66</b>	<b>4.11</b>	<b>(518.02)</b>	<b>(242.71)</b>	<b>(0.15)</b>



Particulars	Tariff Order Dated 31.03.2022 Approved for September, 2023			Actual for September, 2023 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
<b>including REC (7 to 8)</b>									
Must Run - KAPP, TAPP, Dodson etc	543.15	167.92	3.09	519.23	218.63	4.21	(23.92)	50.71	1.12
Short Term	0.00	0.00		503.84	308.48	6.12	503.84	308.48	6.12
Sale of Power	0.00	0.00		59.22	5.08	0.86	59.22	5.08	0.86
DSM	0.00	0.00		-211.28	-38.15	1.81	(211.28)	(38.15)	1.81
PGCIL	0.00	320.42		-	384.16		-	63.74	-
<b>Total</b>	<b>11,863.49</b>	<b>5,905.17</b>	<b>4.98</b>	<b>12,759.89</b>	<b>7,978.67</b>	<b>6.25</b>	<b>896.40</b>	<b>2,073.49</b>	<b>1.28</b>

4.3 Thus, for the month of September, 2023, total variation in power purchase cost is Rs. 2073.49 Crore, out of which Rs. 446.19 Crore was on account of higher quantum (896.40 MU) of power purchase and Rs. 1627.30 Crore was on account of higher rate of average power purchase by Rs.1.28/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.

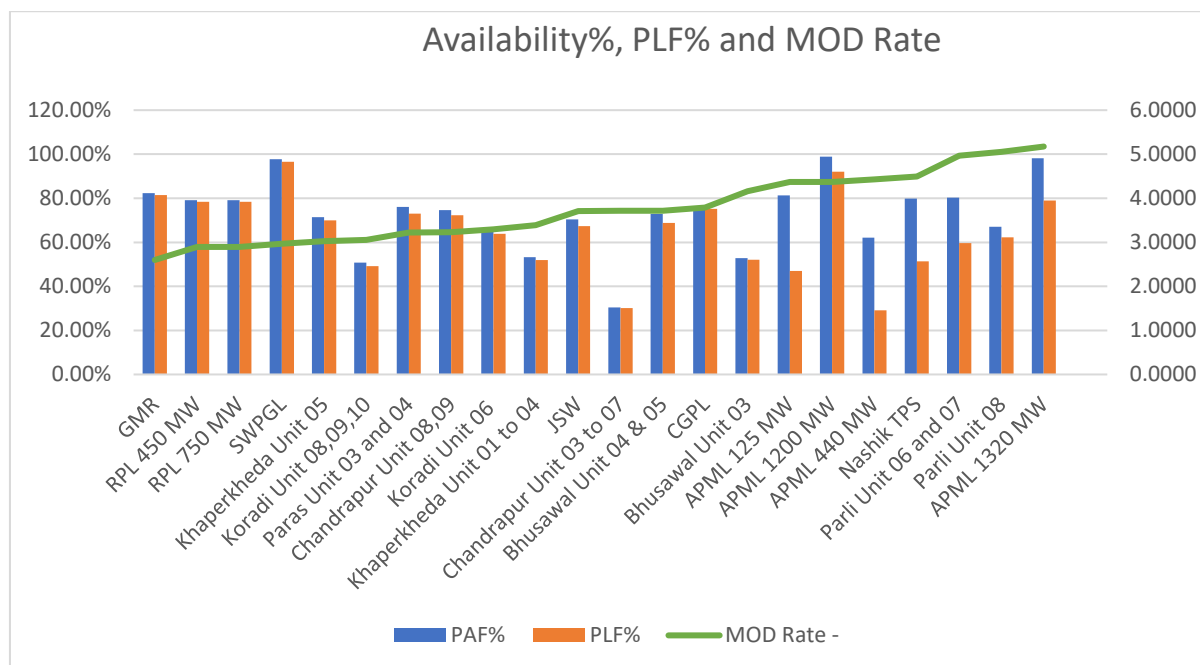
## **5. Power Purchase Cost**

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, 2023. 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 and PLF for SGS and IPPs is given below:



SGS/IPP's Stations are considered for comparison and MOD Rate considered is as applicable from 16 September, 2023 to 30 September, 2023.

**MSPGCL:**

5.5 The Commission has observed that MSEDCL has purchased 4489.27 MU from MSPGCL Thermal and Gas Stations. It was observed that MSEDCL has purchased energy from Parli 6-7 and Parli 8 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), planned outage of some thermal plants and also lower generation from RE sources than approved by the Commission.

5.6 The total overall generation was marginally higher 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, 2023. 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, 2023						Actual for September, 2023						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	3.74	1,674.60	724.34	1.62	5.36	3,714.38	3.57	1,327.67	593.03	1.60	5.17	(759.60)	(0.17)	(0.02)	(0.19)

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 Chandrapur-3-7 and imported coal was also used as per FUP except for Chandrapur 3-7, Khaperkheda 5. Nashik and Koradi 8,9,10 units.

5.10 MSEDCL submitted that CIMFR reports for most of the coal samples for coal supplied in September, 2023 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 11 October, 2023 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	4.408	4.404	-0.004	-0.09%
Bhusawal Unit 04 & 05	3.710	3.865	0.155	4.18%
Khaperkheda Unit 1 to 4	4.197	2.967	-1.230	-29.31%
Khaperkheda Unit 05	4.007	2.572	-1.435	-35.81%

Power Station	Approved Energy Charge Rs/kWh	Actual Energy Charge Rs/kWh	Difference Rs/kWh	Difference %
Nashik TPS	4.647	4.443	-0.204	-4.39%
Chandrapur Unit 03 to 07	4.103	3.644	-0.459	-11.19%
Chandrapur Unit 08,09	3.444	3.261	-0.183	-5.31%
Paras Unit 03 and 04	3.483	2.790	-0.693	-19.90%
Parli Unit 06 and 07	5.100	4.837	-0.263	-5.16%
Parli Unit 08	5.016	4.809	-0.207	-4.13%
Koradi Unit 06 & 07	3.319	3.121	-0.198	-5.97%
Koradi Unit 08,09,10	3.084	3.100	0.016	0.52%
GTPS Uran	6.760	7.225	0.465	6.88%

5.12 The Commission notes that for the month of September, 2023 energy charge of all stations have decreased except for Bhusawal 4 and 5 as compared to approved Energy Charge. The reduction is mainly due to non-utilisation of approved imported coal quantum as per approved FUP.

5.13 MSPGCL has undertaken Case-4 bidding and accordingly entered into contract with Ideal Energy Projects Limited (IEPL) at Rs. Rs. 3.359/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 up to March 2023. The said contract was extended up to October 2023. The power from IEPL started from October 2022. For the month of September, 2023, IEPL has supplied 121.03 MU at Rs 3.359/kWh. The Commission has accordingly considered the said purchase of 121.03 MU for Rs 40.64 Crore at Rs 3.359/kWh.

5.14 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.

5.15 Considering the overall cost of MSPGCL thermal/gas stations, the average power purchase cost is Rs. 5.17/kWh as against Rs. 5.36/kWh approved in the Tariff Order. The average power purchase cost is lower due to lower variable cost by Rs 0.17/kWh and fixed cost by Rs 0.02/kWh due to lower fixed cost paid due to lower availability than approved by the Commission.

5.16 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, 2023	(407.30)	(70.95)	(478.24)

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

**NTPC:**

5.18 MSEDCL has purchased total 3387.68 MUs of power from NTPC’s stations as compared to approved MoD stack of 2350.96 MUs during the month of September, 2023.

5.19 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, 2023.

Particulars	Approved for September, 2023						Actual for September, 2023						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
NTPC	2,350.96	2.25	528.05	445.01	1.89	4.14	3,387.68	2.47	838.19	433.71	1.28	3.75	1,036.72	0.23	(0.61)	(0.38)

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

5.20 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.

5.21 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, 2023	429.10	(130.27)	298.83

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

**IPPs**

5.22 MSEDCL has long term PPA’s with IPP’s viz: JSW, CGPL Mundra, APLM, 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.

5.23 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.

5.24 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	-	-	-	-	-	-
APML 125 MW	3.29	17.67	20.96	1.79	6.79	8.58
APML 1320 MW	32.32	207.44	239.77	34.47	217.59	252.06
APML 1200 MW	31.55	169.68	201.23	33.62	182.23	215.85
APML 440 MW	6.79	36.51	43.29	3.90	9.35	13.25
GMR	5.48	2.12	7.60	5.48	2.12	7.60
RIPL 450 MW	13.90	-	13.90	11.35	-	11.35
RIPL 750 MW	23.16	-	23.16	18.91	-	18.91
Sai Wardha	6.82	-	6.82	6.82	-	6.82
<b>Total</b>	<b>123.30</b>	<b>433.42</b>	<b>556.72</b>	<b>116.34</b>	<b>418.08</b>	<b>534.42</b>

5.25 In response to query raised by the Commission in respect of past Change in Law (CIL) claims for IPPs, MSEDCL submitted that it has claimed CIL amount for past period as per the provisional reconciliation of CIL claim with APL (earlier APML). However, APL (erstwhile APML) in its credit notes has mentioned that the credit notes are given keeping rights reserved to claim principal and corresponding carrying cost and L.P.S. on three issues mentioning as follows:

- i. *“APL considered inland transportation cost for IPT coal on GCV equivalence basis based on the request of MSEDCL. Therefore, the amount indicated above is without prejudice to its right to claim the IPT transportation cost based on MERC order date 28.11.2020 in case no. 132 of 2020.*
- ii. *In terms of MERC order dated 10.12.2020 in case no. 53 of 2020, the of MOU coal shall be considered on weighted average basis for the years in which there is actual receipt of coal, considering the formula as weighted average basis for the years in which there is actual receipt of coal, considering the formula as weighted average of ARB (Coal received) & ADB-275 Kcal/Kg (Balance contracted ACQ)*
- iii. *The differential amount to be claimed on account of defective DSM software shall be claimed separately after the energy account for the period from Oct-21 gets revised.”*

5.26 APL (erstwhile APML), vide letter dated 29.07.2023 recalled its right on the “inland transportation cost for IPT coal on GCV equivalence basis “ and stated as under:

*“...during the reconciliation, inland transportation charges have been considered based on imported coal quantity. However, as per MERC Order dated 28.11.2020 in Case No. 132 of 2020; the GCV equivalence principle shall not apply to Railway transportation charges and hence the inland transportation charges are to be paid considering domestic coal quantity.”*

MSEDCL has made this payment under protest to APL (erstwhile APML) towards claims for domestic coal shortfall *considering in-land normative transportation charges on domestic quantity basis (i.e. Rail not GCV equivalence basis)* as per APL (erstwhile APML) request letter dated 29.07.2023 for the period from April 2013 to February 2023 and March 2023 onwards to avoid future LPS burden and regulation of power as per LPS rules subject to final outcome of the various pending litigation (i.e. Petition No. 269/MP/2018 before CERC and Appeal No. 265 of 2022 before APTEL) and by taking appropriate undertaking from APL (erstwhile APML). Accordingly, MSEDCL has claimed Rs 1585.77 Crore towards past claim of CIL of APL. The Commission has while approving the FAC for April 2023 has allowed the past claim in respect of CIL of IPPs. The aforesaid amount claimed by MSEDCL is also related to the said past claim and is being claimed due to claim of APL by withdrawing the Credit Note in respect of inland transportation charges. The Commission notes that MSEDCL has paid the said amount under protest considering pending appeal. The Commission has accordingly considered the said amount in the FAC claim for September 2023 subject to outcome of the appeal and if the appeal is held in favour of MSEDCL the said amount to be refunded to consumers.

5.27 On an overall basis, the average power purchase cost from IPPs stands at Rs. 10.15/kWh as compared to monthly approved rate of Rs. 5.42/kWh for the month of September, 2023. If the past claims towards Change in Law are not considered, the power purchase cost of IPPs is Rs 5.17/kWh. The said cost is being considered for the FAC computation based on the scrutiny of invoices and details submitted by MSEDCL.

5.28 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, 2023.

Particulars	Approved for September, 2023						Actual for September, 2023						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
1.JSW	-	-	-	13.72	-	-	145.56	3.74	54.39	11.81	0.81	4.55	145.56	-	-	-
2.Mundra UMPP	338.86	4.65	157.60	40.33	1.19	5.84	411.82	3.69	151.96	37.11	0.90	4.59	72.97	(0.96)	(0.29)	(1.25)
3.Adani Power	826.86	3.87	320.13	215.23	2.60	6.47	1,680.66	14.41	2,421.88	201.97	1.20	15.61	853.80	10.54	(1.40)	9.14
4.Emco	112.61	2.71	30.47	14.95	1.33	4.03	117.28	3.65	42.85	14.95	1.27	4.93	4.67	0.95	(0.05)	0.90
5.Rattan India	675.65	3.18	215.18	57.86	0.86	4.04	677.12	2.80	189.54	52.98	0.78	3.58	1.48	(0.39)	(0.07)	(0.46)
6. Sai Wardha	127.18	3.25	41.29	20.40	1.60	4.85	166.92	2.96	49.44	20.06	1.20	4.16	39.74	(0.28)	(0.40)	(0.69)
<b>Total IPPs (1 to 6)</b>	<b>2,081.15</b>	<b>3.67</b>	<b>764.67</b>	<b>362.48</b>	<b>1.74</b>	<b>5.42</b>	<b>3,199.36</b>	<b>9.10</b>	<b>2,910.06</b>	<b>338.89</b>	<b>1.06</b>	<b>10.15</b>	<b>1,118.21</b>	<b>5.421</b>	<b>(0.68)</b>	<b>4.74</b>

Variable charge inclusive of other charges, CIL etc.

5.29 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, 2023	605.62	1516.17	2121.79

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

### Short Term Power Purchase

5.30 MSEDCL has purchased 503.84 MU at average rate of Rs. 6.12/kWh from Power Exchange. The Commission notes that it has not approved any short-term purchase in the Tariff Order. However, MSEDCL has purchased short term power to meet the demand in view of lower availability of contracted thermal Plants. The Commission has verified the details of power purchase cost from the Daily Obligation Summary Report issued by Power Exchange and accordingly considered the said purchase in FAC computation of September, 2023. The Commission notes that MSEDCL has also claimed Rs 5.63 Crores towards EScerts as part of compliance under PAT Cycle-II as per Energy Conservation Act 2001. The Commission is of the view that as per MYT Regulations, 2019, FAC is to be allowed only in respect of change in power purchase cost and inter-state transmission charges. Accordingly, the said cost claimed by MSEDCL is not considered by the Commission.



## Must-Run Sources

5.31 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.

5.32 A detailed comparison of approved against actual purchase from Must Run Stations is shown in Table below:

Particulars	Approved for September 2023						Actual for September, 2023						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*	415.23	-	-	24.05	0.58	0.58	224.89	0.21	4.81	13.37	0.59	0.81	(190.34)	0.21	0.02	0.23
MSPGCL-Hydro Lease rent				42.25						42.25						
1.Non-Solar	1,010.62	5.06	511.05	-	-	5.06	786.80	4.58	360.20	4.07	0.05	4.63	(223.81)	(0.48)	0.05	(0.43)
2.Solar	988.40	3.44	340.32	-	-	3.44	694.20	3.52	244.39	-	-	3.52	(294.20)	0.08	-	0.08
Renewable Energy including REC (1 to 2)	1,999.02	4.26	851.37	-	-	4.26	1,481.00	4.08	604.59	4.07	0.03	4.11	(518.02)	(0.18)	0.03	(0.15)
Others-KAPP, TAPP, Dodson etc	543.15	3.06	166.34	1.58	0.03	3.09	519.23	4.18	217.05	1.58	0.03	4.21	(23.92)	1.12	0.00	1.12

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

5.33 As seen from the aforesaid table, MSEDCL has purchased 224.89 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 224.89 MU approved by the Commission as demand was catered from other must run generation and Koyna hydro was utilized during peak demand hours as per daily requirements.

5.34 It is observed that Solar and Non-Solar energy purchased in September, 2023 i.e., 1481.00 MU was lower than approved i.e., 1999.02 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, 2023. The Commission observes that MSEDCL has purchased 4.61 MU of RE power from G-DAM Market at Rs 6.32/kWh. The Commission has considered the renewable purchase as per details submitted by MSEDCL and invoices of power purchased from SECI, NRVN and other IPPs.

5.35 The Commission notes that MSEDCL has claimed Rs 657.57 Crore due to revision in tariff of KAPP from September 2018 to April 23 as per invoice raised by NPCIL. In response to query raised by the Commission, MSEDCL submitted that as per letter from NPCIL dated 04 July, 2023, amount of Rs. 656.91 Crore. [Rs. 657.57 Crore. (Total Bill Amount) – Rs. 0.66 Crore (TDS)] will be paid in 12 equal monthly installments of Rs. 54.74 Crore per month. Accordingly, the Commission has considered the 5<sup>th</sup> instalment of Rs. 54.74 Crore in respect of NPCIL past arrears.

### ISTS Charges - CTU

5.36 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. 384.16 Crore towards ISTS charges payable to payable to CTU as against Rs. 320.42 Crore approved in the Tariff Order towards FAC computation as per invoice raised by CTU.

### Sale of Power

5.37 MSEDCL has sold 6.08 MU on Power Exchange at Rs 8.36/kWh with realisation of Rs 5.08 Crore. The same is considered in the FAC computation for the month of September, 2023 as per details submitted by MSEDCL. The sale quantum also considers 53.15 MU as power returned to PSPCL under banking arrangement.

### Deviation Quantum and Cost

5.38 MSEDCL has submitted that the deviation quantum (under drawl) of 211.28 MU. As per invoice raised by MSLDC, the quantum is 211.28 MU and corresponding realisation is Rs 38.15 Crore. Accordingly, the Commission has considered the said Deviation quantum and cost in the FAC computation for the month of September, 2023.

### Approved Cost of Power Purchase

5.39 In view of the above, the overall cost approved in the Tariff Order and actual for the month of September, 2023 considered by the Commission is as shown below:

Particulars	Approved for September, 2023						Actual for September, 2023						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 – Thermal	4,473.98	3.74	1,674.60	724.34	1.62	5.36	3,714.38	3.57	1,327.67	593.03	1.60	5.17	(759.60)	(0.17)	(0.02)	(0.19)

Particulars	Approved for September, 2023						Actual for September, 2023						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
MSPGC L-Hydro	415.23	-	-	24.05	0.58	0.58	224.89	0.21	4.81	13.37	0.59	0.81	(190.34)	0.21	0.02	0.23
MSPGC L-Hydro Lease Rent	-	-	-	42.25	-	-	-	-	-	42.25	-	-	-	-	-	-
NTPC	2,350.96	2.25	528.05	445.01	1.89	4.14	3,387.68	2.47	838.19	433.71	1.28	3.75	1,036.72	0.23	(0.61)	(0.38)
IPPs	2,081.15	3.67	764.67	362.48	1.74	5.42	3,199.36	9.10	2,910.06	338.89	1.06	10.15	1,118.21	5.42	(0.68)	4.74
RE including REC	1,999.02	4.26	851.37	-	-	4.26	1,481.00	4.08	604.59	4.07	0.03	4.11	(518.02)	(0.18)	0.03	(0.15)
Must Run - KAPP, TAPP, Dodson etc	543.15	3.06	166.34	1.58	0.03	3.09	519.23	4.18	217.05	1.58	0.03	4.21	(23.92)	1.12	0.00	1.12
Short Term	-	-	-	-	-	-	503.84	6.12	308.48	-	-	6.12	503.84	-	-	-
Sale of Power	-	-	-	-	-	-	59.22	0.86	5.08	-	-	0.86	59.22	-	-	-
DSM	-	-	-	-	-	-	(211.28)	1.81	(38.15)	-	-	1.81	(211.28)	-	-	-
PGCIL	-	-	-	320.42	-	-	-	-	-	384.16	-	-	-	-	-	-
<b>Total</b>	<b>11,863.49</b>	<b>3.36</b>	<b>3,985.03</b>	<b>1,920.14</b>	<b>1.62</b>	<b>4.98</b>	<b>12,759.89</b>	<b>4.83</b>	<b>6,167.61</b>	<b>1,811.06</b>	<b>1.42</b>	<b>6.25</b>	<b>896.40</b>	<b>1.47</b>	<b>(0.20)</b>	<b>1.28</b>

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

5.40 The overall power purchase cost is lower than approved by the Commission mainly due to lower variable cost of power supplied by MSPGCL and lower fixed cost of NTPC and IPPs due to higher generation than approved by the Commission.

5.41 Considering the above, the Commission allows the average power purchase cost of Rs.6.25/kWh for the month of September, 2023 as against Rs. 4.98/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, 2023 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, 2023.

S. No.	Particulars	Units	September, 2023
1	Average power purchase cost approved by the Commission	Rs. /kWh	4.98
2	Actual average power purchase cost	Rs. /kWh	6.25
3	Change in average power purchase cost (=2 -1)	Rs. /kWh	1.28
4	Net Power Purchase	MU	12,759.89
5	<b>Change in fuel and power purchase cost (=3 x 4/10)</b>	<b>Rs. Crore</b>	<b>1,627.30</b>

**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. Since there is no levy of FAC up to October, 23, adjustment for over recovery/ under recovery does not arise.

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

8.1 Since there is no over recovery/ under recovery of FAC, levy of carrying cost does not arise and accordingly not considered by the Commission.

**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 2023	Actual – cumulative up to September 2023	Annual Sliding Distribution Loss – Oct 22 to Sep 23
1	Net Energy Input at Distribution Voltage	MU	1,26,595.02	11,218.80	71463.70	140581.12
2	MSEDCL Metered Sales (excluding sales at EHV level)	MU	1,01,458.38	7,971.26	50511.81	95932.54
3	Estimated Consumption of unmetered Sales	MU	8,719.30	680.04	4588.96	9547.18
4	Distribution Loss (1-2-3)	MU	16,417.34	2,567.50	16,362.93	35101.39
5	Distribution Loss as % of net energy input (4/1)	%	13.00%	22.89%	22.90%	24.97%
6	Excess Distribution Loss = [Actual Distribution Loss (5) - Distribution loss approved] x Net Energy Input (1)	MU	-	1,342.75	-	-
7	<b>Disallowance of FAC due to excess Distribution Loss</b>	<b>Rs. Crore</b>	-	<b>209.22</b>	-	-

9.3 As seen from the above table, the standalone distribution loss for the month of September, 2023 is higher at 22.89% as against approved loss of 13%. The standalone loss for September, 2023 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 the April, 2023 to September, 2023 as compared to last year is as given below:

Particulars	FY 2022-23	FY 2023-24
<i>Approved Loss</i>	<i>14%</i>	<i>13%</i>
April	30.33%	26.38%
May	26.19%	25.90%
June	16.83%	21.36%
July	7.35%	15.04%
August	15.19%	24.52%
September	14.98%	22.89%
Cumulative up to September	19.60%	22.90%

9.5 Since Annual Sliding Distribution Loss of 24.97% is higher than the approved loss of 13%, the Commission has not disallowed Rs 209.22 Crore towards excess Distribution Loss.

## 10. Summary of Allowable Z<sub>FAC</sub>

10.1 The summary of the FAC amount as approved by the Commission for the month of September, 2023 is as shown in the Table below:

S. No.	Particulars	Units	September, 2023 -As submitted	September, 2023 - As Approved
<b>1</b>	<b>Calculation of Z<sub>FAC</sub></b>			
1.1	Change in cost of generation and power purchase attributable to Sales within the License Area (F)	Rs. Crore	1632.92	1627.30
1.2	Carrying cost for over-recovery/under-recovery (C)	Rs. Crore	-	-
1.3	Adjustment factor for over-recovery/under-recovery (B)	Rs. Crore	-	-
<b>1.4</b>	<b>Z<sub>FAC</sub> = F+C+B</b>	Rs. Crore	1632.92	1627.30
<b>2</b>	<b>Calculation of Per Unit FAC</b>			
2.1	Energy Sales within the License Area	MU	11318.96	10443.81*
2.2	Excess Distribution Loss	MU	1272.92	1342.75
2.3	Z <sub>FAC</sub> per kWh	Rs. /kWh	1.45	1.56
<b>3</b>	<b>Allowable FAC</b>			
3.1	FAC disallowed corresponding to excess Distribution Loss [(2.2 x 2.3)/10]	Rs. Crore	-	209.22
3.2	FAC allowable [1.4-3.1]	Rs. Crore	1632.92	1418.08
<b>4</b>	<b>Utilization of FAC Fund</b>			
4.1	Opening Balance of FAC Fund	Rs. Crore	(5.66)	(5.66)
4.2	Carrying Cost/(Holding Cost) on FAC Fund	Rs. Crore	(0.05)	(0.05)
4.3	Z <sub>FAC</sub> for the month (Sr. N. 3.2)	Rs. Crore	1632.92	1418.08
4.4	Closing Balance of FAC Fund	Rs. Crore	1627.22	1412.37
4.5	Z <sub>FAC</sub> leviable/(refundable) to consumer	Rs. Crore	1627.22	1412.37
<b>5</b>	<b>Total FAC based on category wise and slab wise allowed to be recovered</b>	<b>Rs. Crore</b>	1627.22	1412.37

\* Sales considered after disallowance of excess Ag Sales as per norms approved in the MYT Order

10.2 The approved amount in respect of FAC is lower than claimed by MSEDCL in view of the fact that the Commission has disallowed Rs 209.22 Crore towards excess distribution loss and also not allowed Rs 5.63 Crore towards Escerts.

## 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<sub>FAC</sub> 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<sub>FAC</sub> 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. 1408.18 Crore for the month of September, 2023 to be added to the FAC Fund. Accordingly, considering the closing balance of FAC Fund (Rs 5.66 Crore) as on August, 2023, holding cost (Rs 0.05 Crore) and standalone positive FAC (Rs 1418.08) for September, 2023, the closing balance of FAC Fund is Rs 1412.37 Crore.

11.3 To have smooth recovery without any significant impact on tariff of consumers and considering the fact that positive FAC is mainly due to past claims, tariff revision for prior period, the Commission in its approval for the month of June, 2023 has allowed FAC recovery of Rs 238.03 Crore/month including Carrying Cost from October, 2023 onwards for 12 months. The Commission had also held that during the aforesaid recovery

for 12 months, monthly adjustment towards standalone FAC from July 2023 onwards will be done while approving the FAC for the said month. As per the said principle adopted by the Commission for recovering the past amount, the Commission has decided to allow the recovery of Rs 1412.37 Crore for the month of September, 2023 in 10 equal instalments along with carrying cost from December, 2023 onwards in addition to Rs 238.03 Crore allowed to be recovered in FAC approval of June, 2023. Thus, the FAC chargeable to consumers as approved in September, 2023 to be recovered in 10 months is Rs 385.76 Crore. The monthly recovery of Rs 385.76 Crore from December, 2023 onwards for the next 10 months will be adjusted in the standalone FAC approval from October, 2023 onwards for each month and accordingly FAC will be computed and allowed to be recovered from consumers from January, 2024.

11.4 In a view of above, the per unit  $Z_{FAC}$  for the month of September, 2023 to be levied on consumers of MSEDCL in the billing month of December, 2023 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, 2023 (Rs/kWh, Rs/kVAh, Rs/HP – as Applicable)
<b>LT Category</b>	
<b>Residential (LT-I)</b>	
BPL (0-30 Units)	0.10
Consumption > 30 Units per month	
1-100 Units	0.25
101-300 Units	0.45
301-500 Units	0.60
Above 500 Units	0.65
<b>Non-Residential (LT-II)</b>	
0-20 kW	0.45
>20-50 kW	0.60
>50 kW	0.70
<b>Public Water Works (LT-III)</b>	
0-20 kW	0.20
20-40 kW	0.25
Above 40 kW	0.35
<b>Agriculture (LT-IV)</b>	
AG unmetered Pump set	
Zone 1	
A) 0-5 HP	35.00
B) 5HP -7.5 HP	60.00
C) Above 7.5 HP	60.00
Zone 2	
A) 0-5 HP	5.00



Category	Z <sub>FAC</sub> for the month of December, 2023 (Rs/kWh, Rs/kVAh, Rs/HP – as Applicable)
B) 5HP -7.5 HP	20.00
C) Above 7.5 HP	20.00
AG Metered Pump Set	0.20
AG Metered Other	0.30
<b>LT Industries (LT-V)</b>	
0-20 KW	0.30
Above 20 KW	0.40
<b>Street Light (LT-VI)</b>	
Grampanchayat A, B & C Class Municipal Council	0.35
Municipal corporation Area	0.40
<b>Public Services (LT VII)</b>	
Government Educational Institutions and Hospitals	
0-20 kW	0.35
>20-50 kW	0.35
>50 kW	0.45
Others	
0-20 kW	0.30
>20-50 kW	0.50
>50 kW	0.50
<b>Electric Vehicle Charging Stations (LT VIII)</b>	0.40
<b>HT Category</b>	
<b>HT</b>	
Industry (General)	0.35
Industry (Seasonal)	0.35
Commercial	0.55
Railways/Metro/Monorail	0.40
Public Water Works (PWW) and Sewage Treatment Plants	0.35
Agricultural - Pumpsets	0.20
Agricultural - Others	0.30
Group Housing Society (Residential)	0.30
Public Services – Government Educations Institutions and Hospitals	0.40
Public Services - Others	0.45
Electric Vehicle Charging Stations	0.30
<b>EHV</b>	
Industry (General)	0.35
Industry (Seasonal)	0.35

<b>Category</b>	<b>Z<sub>FAC</sub> for the month of December, 2023 (Rs/kWh, Rs/kVAh, Rs/HP – as Applicable)</b>
Commercial	0.55
Railways/Metro/Monorail	0.20
Public Water Works (PWW) and Sewage Treatment Plants	0.30
Agricultural - Pumpsets	0.20
Group Housing Society (Residential)	0.30