



# महाराष्ट्र विद्युत नियामक आयोग

## Maharashtra Electricity Regulatory Commission

Ref. No. MERC/FAC/2022-23/ 0290

Date: 01 July, 2022

To,  
**The 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 May, 2022.

**Reference:** 1. MSEDCL's FAC submission dated 21 June, 2022 for prior approval of FAC for the month of May, 2022.  
2. Data gaps communicated to MSEDCL vide email dated 23 June, 2022.  
3. MSEDCL's response to data gaps by email dated 26 June, 2022 and 27 June, 2022.


Sir,

Upon vetting the FAC calculations for the month of May, 2022 as mentioned in the above reference, the Commission has accorded approval for FAC amount of Rs. 929.80 Crore. However, the said amount is added to the existing amount of April, 2022 along with carrying cost and total amount of Rs 7764.18 Crore is being levied on the consumers as per letter dated 5 April, 2022 issued by the Commission. Accordingly, the FAC chargeable to consumers is as shown in the table below:

Month	FAC Amount (Rs. Crore)
May 2022	7764.18

The aforesaid FAC amount is allowed to be recovered equally over next five months from July, 2022 to November, 2022. The total estimated recovery for five months considering the ceiling is Rs 6537.77 Crore. The balance amount of Rs 1226.42 Crore shall be carried forward and considered for recovery from December 2022 onwards.

Yours faithfully,

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

**Encl:** Annexure A: Detailed Vetting Report for the month of May, 2022.

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## ANNEXURE A

Detailed Vetting Report

Date: 01 July, 2022

### **PRIOR APPROVAL FOR FAC CHARGES FOR THE MONTH OF MAY, 2022**

**Subject:** Prior Approval of Fuel Adjustment Charges (FAC) submission of MSEDCL for the month of May, 2022.

**Reference:** MSEDCL's FAC submission dated 21 June, 2021, 26 June, 2022 and 27 June, 2022 for prior approval of FAC for the month of May, 2022.

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

1.1 MSEDCL has submitted FAC submissions for the month of May, 2022 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 prior approval to MSEDCL for FAC amount of Rs. 929.80 Crore. However, the said amount is added to the existing FAC amount as on April, 2022 along with carrying cost and total amount of Rs 7764.18 Crore is being levied on the consumers equally from July, 2022 to November 2022 as per letter dated 5 April, 2022 issued by the Commission.

#### **2. Background**

2.1 On 30 March, 2020, the Commission has issued Tariff Order for MSEDCL, (Case No.322 of 2019) for True-up of FY 2017-18 and FY 2018-19, provisional True-up for FY 2019-20, and Aggregate Revenue Requirement and Tariff for FY 2020-21 to FY 2024-25. Revised Tariff has been made applicable from 1 April, 2020.

2.2 In the Tariff Order, the Commission has stipulated methodology of levying FAC as follows:

*"8.5.12 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 the accumulated negative FAC becomes 20% of monthly tariff revenue approved by the Commission in Tariff Order. In case of MSEDCL, such limit shall be Rs. 1500 crore. Any accumulated amount above such limit shall be refunded to consumers through FAC mechanism;*
- *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.*

*8.5.13 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. Further, till date, the Distribution Licensees have been levying FAC up to the prescribed limit of 20% of variable component of tariff without prior approval in accordance with the MYT Regulations, 2015, and submitting the FAC computations on a quarterly basis within 60 days of the close of each quarter, for post facto approval. However, as the Commission has now created a 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. This prior approval will facilitate the addressing of any difficulties that may arise in giving effect to this fund. All the details will be submitted by the Distribution Licensee as is being done for approval of FAC on post facto basis. Thus the FAC to the consumers shall now be levied with prior approval of the Commission”*

- 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 May, 2022 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
			May 2022 (MU)
<b>HT Category</b>			
Industry (General)	36,590.51	3,102.01	3,154.90
Industry (Seasonal)	102.93	9.43	5.08
Commercial	1,968.12	212.13	169.08
Railways/Metro/Monorail	83.72	9.94	10.19
Public Water Works (PWW)	2,101.00	181.02	183.77
Agricultural – Pumpsets	1,323.16	166.65	135.39
Agricultural – Others	275.94	25.77	26.54
Group Housing Society (Residential)	243.80	24.77	23.06
Public Services - Government	298.91	30.19	32.00
Public Services – Others	902.93	88.64	75.20
Electric Vehicle Charging Stations	0.31	0.03	4.00
MSPGCL Auxiliary	183.74	19.75	27.91
Other Adjustment	4,842.00	403.50	606.04
<b>Sub-total (A)</b>	<b>48,917.06</b>	<b>4,273.82</b>	<b>4,453.16</b>
<b>LT Category</b>			
BPL	49.63	2.93	4.06
Residential	25,151.26	2,770.60	2,521.80
Non-Residential	8,120.69	812.29	584.05
Public Water Works	993.84	89.37	77.29
AG Metered (Pump-sets)	18,612.07	1,617.97	1,492.00
AG Metered (Others)	140.00	13.57	20.35
Industrial	10,571.64	888.92	995.34
Street Lights	2,571.73	229.47	95.52
Public Services	649.79	61.76	65.12
Electric Vehicle Charging Stations	0.23	0.02	0.14
<b>Sub-total (B)</b>	<b>66,860.87</b>	<b>6,486.91</b>	<b>5,855.67</b>
<b>Total – Metered (C = A+B)</b>	<b>1,15,777.93</b>	<b>10,760.73</b>	<b>10,308.83</b>
Unmetered Sale (D)	8,783.32	677.22	779.00
<b>Grand Total(C+D)</b>	<b>1,24,561.25</b>	<b>11,437.95</b>	<b>11,087.83</b>

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

3.2 For the month of May, 2022, it is observed that actual sales of 11087.83 MU is lower as compared to the approved energy sales of 11437.95 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 May, 2022. **As per the data, the billing of about 97.3% of sales is undertaken as per actual meter readings and balance 2.7% 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 May, 2022.
- 3.4 The number of actual and estimated meter readings undertaken by MSEDCL for the month of May, 2022 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	22641	0	22641
2	LT	21526716	2896175	24422891
	<b>Total</b>	<b>21549357</b>	<b>2896175</b>	<b>24445532</b>

- 3.5 Further, comparison of sales for April, 2022 to May, 2022 as compared to last year is as shown below:

Particulars	LT - Residential (MU)	LT Others (MU)	HT (MU)	Ag- Unmetered	Total (MU)
Apr-21	2010	3231	3734	677	9652
Apr-22	2241	3281	4262	779	10563
May-21	2024	3091	3508	677	9300
May-22	2522	3334	4453	779	11088
April-21 to May-21	<b>4034</b>	<b>6321</b>	<b>7242</b>	<b>1354</b>	<b>18953</b>
April-22 to May-22	<b>4763</b>	<b>6615</b>	<b>8715</b>	<b>1558</b>	<b>21651</b>

- 3.6 The Commission observes that overall sales in May, 2022 have increased as compared to May, 2021 due to increase in sales across all categories.
- 3.7 MSEDCL has considered agriculture sales are estimated based on consumption norms as per Tariff Order and previous three-year trend is used for estimation of monthly sale. The Commission while approving the FAC for the month of May, 2022 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 May, 2022. 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 22- May 22	2984	2,99,45,222	100	1558	15810626	99	4542	45755848	99
As Approved – April 22- May 22	2984	2,99,45,222	100	1442	15810626	91	4426	45755848	97

3.8 Based on the agriculture sales approved in the above table, the Commission has restricted 57.78 MU for unmetered connections in agriculture sales and considered in computation of Distribution Loss so as 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 overdrawn (23 MU) from the actual schedule			
5	Sale of Surplus Power	MSEDCL has sold 76.56 MU at Rs.7.68/kWh thereby benefitting its consumers.			
6	Power Purchase	Actual Net Power Purchase is 14325.73 MU as against approved 13274.42 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	4,740.60	5,462.72	38%
		NTPC	2,629.35	3,543.52	25%
		IPP	3,199.28	3,134.41	22%
		Renewable	2,162.11	1,700.00	12%
		Must Run	543.09	443.92	3%
		Short Term	0.00	94.72	1%
		Sale of Power	0.00	76.56	1%
		DSM	0.00	23.00	0%
		<b>Total</b>	<b>13,274.42</b>	<b>14,325.73</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 MYT Order in Case No. 322 of 2019 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>			
	b. Section 63 of Electricity Act, 2003 – IPPs	<p>Cost and MUs verified as per Invoice</p>			





Sr. No.	Particular	Compliance
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 May, 2022 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 May, 2022 submitted by MSEDCL as compared to average power purchase cost approved in Tariff Order:

Particulars	Tariff Order Dated 30.03.2020 Approved for May, 2022			Actual for May, 2022 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	4,460.62	1,903.25	4.27	4,890.61	2,140.26	4.38	429.99	237.01	0.11
MSPGCL-Hydro (including Lease Rent)	279.98	70.19	2.51	572.11	70.11	1.23	292.13	(0.08)	(1.28)
NTPC	2,629.35	1,019.91	3.88	3,543.52	1,647.60	4.65	914.18	627.69	0.77
1.JSW	164.28	66.05	4.02	-	-	-	(164.28)	(66.05)	-
2.Mundra UMPP	438.07	137.12	3.13	289.44	203.30	7.02	(148.63)	66.18	3.89
3.Adani Power	1,782.40	693.30	3.89	1,871.63	1,332.68	7.12	89.23	639.38	3.23
4.Emco	116.36	57.64	4.95	142.84	50.67	3.55	26.48	(6.97)	(1.41)
5.Rattan India	698.17	315.28		671.62	349.36	5.20	(26.55)	34.08	5.20
6. Sai Wardha	0.00	0.00		158.87	68.51	4.31	158.87	68.51	4.31
<b>Total IPPs (1 to 6)</b>	<b>3,199.28</b>	<b>1,269.40</b>	<b>3.97</b>	<b>3,134.41</b>	<b>2,004.53</b>	<b>6.40</b>	<b>(64.87)</b>	<b>735.13</b>	<b>2.43</b>
7.Non-Solar	1,081.49	488.33	4.52	1,087.61	524.90	4.83	6.12	36.58	0.31
8.Solar	1,080.62	377.67	3.49	612.39	233.99	3.82	(468.23)	(143.68)	0.33
<b>Renewable Energy including REC (7 to 8)</b>	<b>2,162.11</b>	<b>866.00</b>	<b>4.01</b>	<b>1,700.00</b>	<b>758.89</b>	<b>4.46</b>	<b>(462.11)</b>	<b>(107.11)</b>	<b>0.46</b>



Particulars	Tariff Order Dated 30.03.2020 Approved for May, 2022			Actual for May, 2022 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
Must Run - KAPP, TAPP, Dodson etc	543.09	150.29	2.77	443.92	132.97	3.00	(99.17)	(17.32)	0.23
Short Term	0.00	0.00		94.72	59.83	6.32	94.72	59.83	6.32
Sale of Power	0.00	0.00		76.56	58.79	7.68	76.56	58.79	7.68
DSM	0.00	0.00		23.00	19.72	8.58	23.00	19.72	8.58
PGCIL	0.00	305.16		-	285.41		-	(19.75)	-
<b>Total</b>	<b>13,274.42</b>	<b>5,584.19</b>	<b>4.21</b>	<b>14,325.73</b>	<b>7,060.53</b>	<b>4.93</b>	<b>1,051.31</b>	<b>1,476.34</b>	<b>0.72</b>

4.3 Thus, for the month of May, 2022, total variation in power purchase cost is Rs. 1476.34 Crore, out of which Rs. 442.26 Crore was on account of higher quantum (1051.31 MU) of power purchase and Rs. 1034.09 Crore was on account of higher rate of average power purchase by Rs. 0.72/kWh. FAC mechanism allows only impact of variation in power purchase rate to be passed through as FAC rate over and above approved tariff. The Commission observes that increase in power purchase without corresponding increase in sales than approved by the Commission has resulted in higher distribution loss than approved by the Commission in the Tariff Order.

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

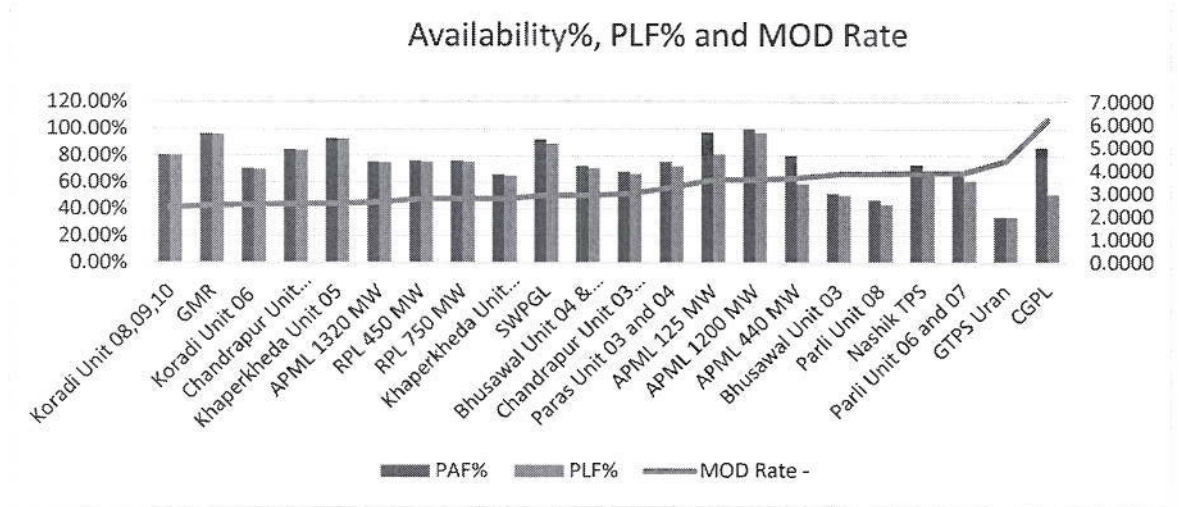
5.1 The Commission has sought detailed bills/invoices for all of the power purchase sources in order to verify the claim of MSEDCL with regards to average power purchase cost for the month of May, 2022. The Commission has verified the Net Purchase, Variable Cost, Fixed Charge and the Power Purchase Cost 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/IPPs Stations are considered for comparison and MOD Rate considered is as applicable from 16 May, 2022 to 31 May, 2022.

**MSPGCL:**

5.5 The Commission has observed that MSEDCL has purchased 4890.61 MU from MSPGCL Thermal and Gas Stations. It was observed that MSEDCL has purchased energy from Bhusawal 3, 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 in view of the fact that actual rates considered for MoD were lower than the approved rate. Further, due to increase in demand and outage of units for various reasons like coal shortage, forced outage, all thermal plants were taken on bar to meet out the demand.

5.6 The total overall generation was 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 May, 2022. 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 May, 2022						Actual for May, 2022						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	4,460.62	2.83	1,263.69	639.56	1.43	4.27	4,890.61	3.05	1,490.29	649.97	1.33	4.38	429.99	0.21	(0.10)	0.11

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

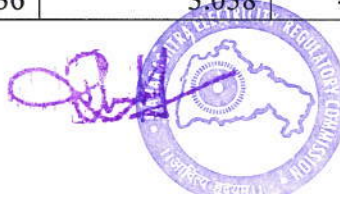


- 5.7 Further, in response to data gaps raised by the Commission, MSEDCL submitted that minor mismatch in Fixed Charges claimed in FAC and invoice raised by MSPGCL is due to variation in Average of Cumulative Availability considered by MSEDCL & MSPGCL for Bhusawal -3, Khaperkheda 1-4, Paras, Parli 6-7, Parli 8 and Koradi 8-10. Also, 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 30 March, 2020 in Case No 296 of 2019 has approved Fuel Utilisation Plan of MSPGCL. The Commission in the said Order has given in principle approval for the various measures proposed by MSPGCL including 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 for delivery to begin from May 2022. The imported coal was used in Bhusawal and Nashik stations in May 2022 and is likely to be used also at Khaperkheda and Chandrapur Stations in coming months. Further, washed coal has started and supplied to Bhusawal, Koradi 8,9,10, Koradi 6, Khaperkheda 1-4 and 5 and Chandrapur 3-7 and 8-9 units in May, 2022.
- 5.10 MSEDCL submitted that as the working of the third-party coal analysis agency, M/s. CIMFR is severely hampered due the COVID-19, the CIMFR reports for most of the coal samples for coal supplied in May, 2022 to all the MSPGCL stations are not received. In view of the same, 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 15 June, 2022 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	4.102	3.979	-0.123	-3.00%
Bhusawal Unit 04 & 05	3.436	3.038	-0.398	-11.58%



Power Station	Approved Energy Charge Rs/kWh	Actual Energy Charge Rs/kWh	Difference Rs/kWh	Difference %
Khaperkheda Unit 1 to 4	2.945	3.098	0.153	5.20%
Khaperkheda Unit 05	2.583	3.002	0.419	16.22%
Nashik TPS	3.569	3.894	0.325	9.11%
Chandrapur Unit 03 to 07	2.658	3.177	0.519	19.53%
Chandrapur Unit 08 and 09	2.573	2.710	0.137	5.32%
Paras Unit 03 and 04	3.146	3.110	-0.036	-1.14%
Parli Unit 06 and 07	4.240	4.284	0.044	1.04%
Parli Unit 08	4.060	4.223	0.163	4.01%
Koradi Unit 06 and 07	2.920	2.524	-0.396	-13.56%
Koradi Unit 08,09,10	2.398	2.407	0.009	0.38%
GTPS Uran	2.847	4.417	1.570	55.15%

- 5.12 The Commission notes that for the month of May, 2022, energy charge of Khaperkheda, Nashik and Chandrapur Units is beyond 5% of the approved charge. Hence, it is essential that MSPGCL takes adequate steps, appropriate action and work on various options to implement the approved FUP to reduce the fuel cost. As mentioned above, MSPGCL has awarded contract for washing of coal and such washed coal is being used for to Bhusawal, Koradi 8,9,10, Koradi 6, Khaperkheda 1-4 and 5 and Chandrapur 3-7 and 8-9 units in May, 2022. Further, actual Energy Charge is being computed considering GCV loss of 600 kCal/kg applicable from April, 2022 as allowed by the Commission in review Order dated 1 March, 2021 of MSPGCL as against 475 kCal/kg considered by the Commission while approving Energy Charge in the Tariff Order. This has also resulted in increase of Energy Charge of 1-13 Paise/kWh for the aforesaid stations.
- 5.13 It is also observed that Energy Charge of Uran has also increased considerably for May 2022. This is due to the fact that prices of APM Gas have increased due to increase in notified APM gas price from \$2.90/MMBTU (upto March 2022) to \$6.10/MMBTU from April 2022 by Ministry of Petroleum and Natural Gas, Government of India.
- 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. 4.38/kWh as against Rs. 4.27/kWh approved in the Tariff Order. The average power purchase cost is higher due to higher variable cost by Rs 0.21/kWh, which is offset by lower fixed cost/unit (Rs 0.10/kWh) due to higher generation 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
May, 2022	183.47	53.54	237.01

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 3543.52 MUs of power from NTPC's stations as compared to approved MoD stack of 2629.35 MUs during the month of May, 2022.

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 May, 2022.

Particulars	Approved for May 2022						Actual for May 2022						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	2,629.35	2.20	579.43	440.48	1.68	3.88	3,543.52	3.25	1,153.33	494.27	1.39	4.65	914.18	1.05	(0.28)	0.77

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

5.20 In response to data gaps raised by the Commission in respect of increase in variable cost, NTPC submitted that due to coal shortage scenario and MoP notification, non-pit head NTPC stations (KhSTPS-II, Muada -I and II, Solapur, Gadawara and Khargone) are utilizing imported coal for blending. Imported coal being costly, variable cost of these stations has increased than approved rates. 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
May, 2022	354.61	273.08	627.69

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, APML, 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 Order, 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	3.80	24.42	28.22	2.75	16.99	19.74
APML 1320 MW	27.02	206.88	233.90	26.12	123.63	149.75
APML 1200 MW	36.48	234.45	270.93	31.74	195.75	227.49
APML 440 MW	10.44	67.08	77.52	7.06	43.54	50.60
EMCO Power	6.35	-	6.35	5.84	-	5.84
RIPL 450 MW	12.51	-	12.51	9.88	-	9.88
RIPL 750 MW	20.86	-	20.86	16.46	-	16.46
Sai Wardha	-	-	-	6.52	-	6.52
<b>Total</b>	<b>117.46</b>	<b>532.84</b>	<b>650.30</b>	<b>106.38</b>	<b>379.91</b>	<b>486.30</b>



5.25 Thus, on an overall basis considering the above impact, the average power purchase cost from IPPs stands at Rs. 6.40/kWh as compared to monthly approved rate of Rs. 3.97/kWh for the month of May, 2022. The said cost is being considered for the FAC computation based on the scrutiny of invoices submitted by MSEDCL.

5.26 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 May, 2022.

Particulars	Approved for May, 2022						Actual for Ma, 2022						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	164.28	3.23	53.03	13.01	0.79	4.02	-	-	-	-	-	-	(164.28)	-	-	-	-
2.Mundra UMPP	438.07	2.22	97.17	39.96	0.91	3.13	289.44	5.85	169.20	34.10	1.18	7.02	(148.63)	3.63	0.27	3.89	3.89
3.Adani Power	1,782.40	2.62	466.45	226.85	1.27	3.89	1,871.63	5.90	1,104.97	227.71	1.22	7.12	89.23	3.29	(0.06)	3.23	3.23
4.Emco	116.36	3.67	42.74	14.90	1.28	4.95	142.84	2.47	35.34	15.33	1.07	3.55	26.48	(1.20)	(0.21)	(1.41)	(1.41)
5.Rattan India	698.17	3.69	257.58	57.71	0.83	4.52	671.62	4.33	290.55	58.81	0.88	5.20	(26.55)	0.64	0.05	0.69	0.69
6. Sai Wardha	-	-	-	-	-	-	158.87	2.99	47.48	21.04	1.32	4.31	158.87	-	-	-	-
<b>Total IPPs (1 to 6)</b>	<b>3,199.28</b>	<b>2.87</b>	<b>916.97</b>	<b>352.43</b>	<b>1.10</b>	<b>3.97</b>	<b>3,134.41</b>	<b>5.26</b>	<b>1,647.54</b>	<b>356.99</b>	<b>1.14</b>	<b>6.40</b>	<b>(64.87)</b>	<b>2.390</b>	<b>0.04</b>	<b>2.43</b>	<b>2.43</b>

Variable charge inclusive of other charges, CIL etc.

5.27 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
May 2022	-25.74	760.87	735.13

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

5.28 In response to data gaps raised by the Commission in respect of purchase of power from CGPL Mundra as per consent letter dated 10 April 2022, MSEDCL submitted that considering power shortage scenario and high Exchange rate, and after taking approval from Cabinet, MSEDCL is purchasing power from CGPL purely on short term up basis from April 2022 till 15 June, 2022. The Commission notes that Energy Charge for the purchase from CGPL Mundra has been considered as Rs 6.05/kWh as per directions issued by MoP to generating companies (imported coal based) under Section 11 of Electricity Act vide letter dated 13 May 2022. Also, the said rate is revised to Rs 6.22/kWh vide letter dated 27 May, 2022 issued by MoP, GOI. MSEDCL has also filed Case No 87 of 2022 which is pending before the Commission.





5.29 MSEDCL has claimed Rs 272 Crore and Rs. 100.69 Crore for APML and RIPL respectively towards Evacuation Facility Charges as per Judgement dated 22 March, 2022 of Hon'ble APTEL in Appeal No 40 of 2022 and Appeal No 118 of 2021. Accordingly, the said amount is being considered as per judgment of Hon'ble APTEL.

### Short Term Power Purchase

5.30 MSEDCL has purchased 94.72 MU at average rate of Rs. 6.32/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 increased 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 May 2022.

### 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 May 2022						Actual for May 2022						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*	279.98	-	-	23.87	0.85	0.85	572.11	0.23	13.00	14.11	0.25	0.47	292.13	0.23	(0.61)	(0.38)
MSPGCL-Hydro Lease rent	-	-	-	46.32	-	-	-	-	-	42.99	-	-	-	-	-	-
1.Non-Solar	1,081.49	4.52	488.33	-	-	4.52	1,087.61	4.79	521.34	3.56	0.03	4.83	6.12	0.28	0.03	0.31
2.Solar	1,080.62	3.49	377.67	-	-	3.49	612.39	3.82	233.99	-	-	3.82	(468.23)	0.33	-	0.33
Renewable Energy including REC (1 to 2)	2,162.11	4.01	866.00	-	-	4.01	1,700.00	4.44	755.33	3.56	0.02	4.46	(462.11)	0.44	0.02	0.46
Others-KAPP, TAPP, Dodson etc	543.09	2.75	149.50	0.79	0.01	2.77	443.92	2.98	132.18	0.79	0.02	3.00	(99.17)	0.22	0.00	0.23

*\*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 572.11 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 higher than 279.98 MU approved by the Commission to optimise the power purchase cost in view prevailing higher rates prevailing in short term market considering coal shortage scenario.

- 5.34 It is observed that Solar and Non-Solar energy purchased in May, 2022 i.e., 1700 MU was lower than approved i.e., 2162.11 MU by the Commission in the Tariff Order. The generation is lower due to low wind and lower solar capacity addition due to pandemic than considered by the Commission in the Tariff Order. MSEDCL has not purchased any RECs in the month of May, 2022. The Commission observes that MSEDCL has purchased 8.72 MUs of RE power from G-DAM Market at Rs 5.90/kWh. 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**

- 5.35 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. 285.41 Crore towards ISTS charges payable to payable to CTU as against Rs. 305.16 Crore approved in the Tariff Order towards FAC computation as per invoice raised by CTU.

#### **Sale of Power**

- 5.36 MSEDCL has done sale of surplus power to the extent of 76.56 MU during the month of May, 2022 at Rs. 7.68/kWh. With such a sale of power MSEDCL has earned revenue of Rs. 59.79 Crore.
- 5.37 It is observed that entire 0.45 MU was sold on IEX. The sales realisation was more than that of variable cost of generator running above technical minimum operating in MOD. Accordingly, the overall realisation in respect of sale of power is Rs. 7.68/kWh has benefitted the consumers. Hence, the Commission has considered the actual quantum and revenue against surplus sale.

#### **Deviation Quantum and Cost**

- 5.38 MSEDCL has submitted that the deviation quantum (overdrawl) as per invoice raised by MSLDC is 23 MU and corresponding cost of Rs 19.72 Crore. Accordingly, the Commission has considered the said Deviation quantum and cost in the FAC computation for the month of May, 2022.



## 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 May, 2022 considered by the Commission is as shown below:

Particulars	Approved for May 2022						Actual for May 2022						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	4,460.62	2.83	1,263.69	639.56	1.43	4.27	4,890.61	3.05	1,490.29	649.97	1.33	4.38	429.99	0.21	(0.10)	0.11
MSPGCL - Hydro	279.98	-	-	23.87	0.85	0.85	572.11	0.23	13.00	14.11	0.25	0.47	292.13	0.23	(0.61)	(0.38)
MSPGCL - Hydro Lease Rent	-	-	-	46.32	-	-	-	-	-	42.99	-	-	-	-	-	-
NTPC	2,629.35	2.20	579.43	440.48	1.68	3.88	3,543.52	3.25	1,153.33	494.27	1.39	4.65	914.18	1.05	(0.28)	0.77
IPPs	3,199.28	2.87	916.97	352.43	1.10	3.97	3,134.41	5.26	1,647.54	356.99	1.14	6.40	(64.87)	2.39	0.04	2.43
RE including REC	2,162.11	4.01	866.00	-	-	4.01	1,700.00	4.44	755.33	3.56	0.02	4.46	(462.11)	0.44	0.02	0.46
Must Run - KAPP, TAPP, Dodson etc	543.09	2.75	149.50	0.79	0.01	2.77	443.92	2.98	132.18	0.79	0.02	3.00	(99.17)	0.22	0.00	0.23
Short Term	-	-	-	-	-	-	94.72	6.32	59.83	-	-	6.32	94.72	-	-	-
Sale of Power	-	-	-	-	-	-	76.56	7.68	58.79	-	-	7.68	76.56	-	-	-
DSM	-	-	-	-	-	-	23.00	8.58	19.72	-	-	8.58	23.00	-	-	-
PGCIL	-	-	-	305.16	-	-	-	-	-	285.41	-	-	-	-	-	-
<b>Total</b>	<b>13,274.42</b>	<b>2.84</b>	<b>3,775.58</b>	<b>1,808.61</b>	<b>1.36</b>	<b>4.21</b>	<b>14,325.73</b>	<b>3.64</b>	<b>5,212.44</b>	<b>1,848.09</b>	<b>1.29</b>	<b>4.93</b>	<b>1,051.31</b>	<b>0.79</b>	<b>(0.07)</b>	<b>0.72</b>

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

5.40 The overall power purchase cost is higher mainly due to higher short-term rate and higher variable cost of power supplied by MSPGCL, NTPC and IPPs. However, the higher variable cost is offset by lower fixed cost/unit due to higher despatch than approved by the Commission from MSPGCL, and NTPC.

5.41 Considering the above, the Commission allows the average power purchase cost of Rs.4.93/kWh for the month of May, 2022 as against Rs. 4.21/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 May, 2022 as shown in above table. The same has been compared with the average power purchase cost approved by the Commission in Tariff Order dated 30 March, 2020 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 May, 2022.

S. No.	Particulars	Units	May, 2022
1	Average power purchase cost approved by the Commission	Rs./kWh	4.21
2	Actual average power purchase cost	Rs./kWh	4.93
3	Change in average power purchase cost (=2 -1)	Rs./kWh	0.72
4	Net Power Purchase	MU	14,325.73
5	<b>Change in fuel and power purchase cost (=3 x 4/10)</b>	<b>Rs. Crore</b>	<b>1,034.09</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. FAC for the month of January, 2022 was levied in May 2022 as per letter dated 5 April, 2022 considering uniform levy of FAC. Accordingly, the adjustment of Rs 4.96 Crore (under recovery) is being done in the FAC for May 2022

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

- 8.1 As there is under recovery of Rs 4.96 Crore, the Commission has considered carrying cost of Rs 0.04 Crore while approving FAC for the month of May, 2022.

**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 May 2022	Actual – cumulative up to May 2022	Annual Sliding Distribution Loss – June 21 to May 22
1	Net Energy Input at Distribution Voltage	MU	1,27,414.02	13,450.01	26,981.57	134639.70
2	MSEDCL Metered Sales (excluding sales at EHV level)	MU	1,00,813.73	9,205.87	17,911.95	95708.49
3	Estimated Consumption of unmetered Sales	MU	8,783.32	721.22	1,442.45	9054.85
4	Distribution Loss (1-2-3)	MU	17,816.97	3,522.92	7,627.18	29876.36
5	Distribution Loss as % of net energy input (4/1)	%	14%	26.19%	28.27%	22.19%
6	Excess Distribution Loss = [Actual Distribution Loss (5) - Distribution loss approved] x Net Energy Input (1)	MU	-	1,157.06	-	-
7	<b>Disallowance of FAC due to excess Distribution Loss</b>	<b>Rs. Crore</b>	-	<b>109.28</b>	-	-

9.3 As seen from the above table, the standalone distribution loss for the month of May, 2022 is higher at 26.19% as against approved loss of 14%. The standalone loss for May, 2022 is higher mainly due to estimated Ag sales and sales considered as per billing cycle whereas power purchase is considered for the standalone month.

9.4 The comparison of Distribution Loss for the April, 2022 to May 2022 as compared to last year is as given below:

Particulars	FY 2022-23	FY 2021-22
<i>Approved Loss</i>	<i>14%</i>	<i>16%</i>
April	30.33%	30.44%
May	26.19%	27.15%
Cumulative upto May	<b>28.27%</b>	<b>28.87%</b>

9.5 As Annual Sliding Distribution Loss of 22.19% is higher than the approved loss of 14%, the Commission has disallowed Rs 109.28 Crore towards the same.



## 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 May, 2022 is as shown in the Table below:

S. No.	Particulars	Units	May, 2022 -As submitted	May, 2022 -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	1,045.82	1,034.09
1.2	Carrying cost for over-recovery/under-recovery (C)	Rs. Crore	0.04	0.04
1.3	Adjustment factor for over-recovery/under-recovery (B)	Rs. Crore	4.96	4.96
<b>1.4</b>	<b>Z<sub>FAC</sub> = F+C+B</b>	Rs. Crore	1,050.81	1,039.08
<b>2</b>	<b>Calculation of Per Unit FAC</b>			
2.1	Energy Sales within the License Area	MU	11,059.92	11002.14*
2.2	Excess Distribution Loss	MU	1,071.97	1,157.06
2.3	Z <sub>FAC</sub> per kWh	Rs./kWh	0.95	0.94
<b>3</b>	<b>Allowable FAC</b>			
3.1	FAC disallowed corresponding to excess Distribution Loss [(2.2 x 2.3)/10]	Rs. Crore	101.85	109.28
3.2	FAC allowable [1.4-3.1]	Rs. Crore	948.96	929.80
<b>4</b>	<b>Utilization of FAC Fund</b>			
4.1	Opening Balance of FAC Fund	Rs. Crore	-	6785.75
4.2	Carrying Cost/(Holding Cost) on FAC Fund	Rs. Crore	-	48.63
4.3	Z <sub>FAC</sub> for the month (Sr. N. 3.2)	Rs. Crore	948.96	929.80
4.4	Closing Balance of FAC Fund	Rs. Crore	948.96	7764.18
4.5	Z <sub>FAC</sub> leviable/(refundable) to consumer	Rs. Crore	948.96	7764.18
<b>5</b>	<b>Total FAC based on category wise and slab wise allowed to be recovered in the billing month of July, 2022, August, 2022 and September 2022</b>	<b>Rs. Crore</b>	-	3941.13

\*Ag Sales allowed as per norms approved by the Commission in the Tariff Order.

10.2 The standalone FAC for the month of May, 2022 is Rs 929.80 Crore which will added to the FAC Fund. Accordingly, the total FAC amount to be recovered is Rs 7764.18 Crore. The standalone approved amount for the month of May, 2022 is lower than claimed by MSEDCL in view of higher disallowance due to excess distribution loss than considered by MSEDCL.



## 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 Z<sub>FAC</sub> per kWh for a particular Tariff category/sub-category/consumption slab shall be computed as per the following formula: —*

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

*Where:*

*Z<sub>FAC Cat</sub> = Z<sub>FAC</sub> 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:*

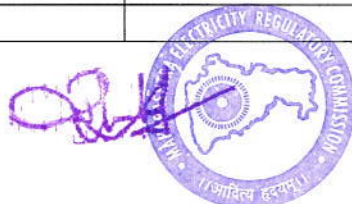
*Provided further that any under-recovery in the Z<sub>FAC</sub> on account of such ceiling shall be carried forward and shall be recovered by the Distribution Licensee over such future period as may be directed by the Commission....”*

- 11.2 The Commission allows the FAC amount of Rs. 929.80 Crore for the month of May 2022 to be added to the FAC Fund.
- 11.3 The Commission in its approval for the month of April, 2022 has directed MSEDCL to carry forward the approved FAC amount of Rs. 6785.75 Crore (including adjustment of under recovery) to be accumulated as FAC Fund to be carried forward to the next billing cycle with carrying cost. The opening balance of FAC fund along with carrying cost is Rs. 6834.38 Crore



- 11.4 Accordingly, considering the approved FAC amount of Rs. 929.80 Crore for the month of May, 2022 and same after being added to the FAC fund of 6834.38 Crore, the total balance amount to be recovered is Rs. 7764.18 Crore. The Commission in its letter dated 5 April, 2022 has indicated recovery of FAC amount in three months. The recovery of FAC amount in three months will hit the ceiling limit of 20% and there would be recovery of Rs 3941.43 Crore and unrecovered amount would still be Rs 3823.05 Crore. With such unrecovered amount, there would be ceiling limit applicable for further two months. Considering the fact that ceiling limit will be applicable for next five months, **the said FAC amount of Rs 7764.18 Crore is being allowed to be recovered equally in five months from July, 2022 to November, 2022. The amount allowed to be recovered for each month along with carrying cost is Rs 1586.18 Crore. However, the said recovery exceeds the 20% ceiling of variable component of tariff as specified in the MYT Regulations. Accordingly, the Commission has allowed recovery of Rs 1307.55 Crore considering the ceiling at 20% of the variable component of tariff. The Commission has allowed the equal recovery so as to avoid tariff variation every month to the Consumers. The total estimated recovery for five months considering the ceiling is Rs 6537.77 Crore. The balance amount of Rs 1226.42 Crore is carried forward and will be considered for recovery from December 2022 onwards.**
- 11.5 In view of the above, the per unit  $Z_{FAC}$  for the month of May, 2022 to be levied on consumers of MSEDCL in the billing month of July, 2022, August, 2022, September, 2022, October, 2022 and November, 2022 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 May, 2022 to be levied in July, 2022, August, 2022, September, 2022, October, 2022 and November, 2022 (Rs/kWh, Rs/kVAh, Rs/HP – as Applicable)
<b>LT Category</b>	
<b>Residential (LT-I)</b>	
BPL (0-30 Units)	0.25
Consumption > 30 Units per month	
1-100 Units	0.65
101-300 Units	1.45
301-500 Units	2.05
Above 500 Units	2.35
<b>Non-Residential (LT-II)</b>	
0-20 kW	1.40
>20-50 kW	2.15
>50 kW	2.55
<b>Public Water Works (LT-III)</b>	





Category	Z <sub>FAC</sub> for the month of May, 2022 to be levied in July, 2022, August, 2022 September, 2022, October, 2022 and November, 2022 (Rs/kWh, Rs/kVAh, Rs/HP – as Applicable)
0-20 kW	0.50
20-40 kW	0.75
Above 40 kW	1.00
<b>Agriculture (LT-IV)</b>	
AG unmetered Pump set	
Zone 1	
A) 0-5 HP	20.00
B) 5HP -7.5 HP	20.00
C) Above 7.5 HP	20.00
Zone 2	
A) 0-5 HP	10.00
B) 5HP -7.5 HP	15.00
C) Above 7.5 HP	15.00
AG Metered Pump Set	0.40
AG Metered Other	0.65
<b>LT Industries (LT-V)</b>	
0-20 KW	1.00
Above 20 KW	1.20
<b>Street Light (LT-VI)</b>	
Grampanchayat A, B & C Class Municipal Council	1.00
Municipal corporation Area	1.25
<b>Public Services (LT VII)</b>	
Government Educational Institutions and Hospitals	
0-20 kW	0.65
>20-50 kW	0.90
>50 kW	1.15
Others	
0-20 kW	0.90
>20-50 kW	1.45
>50 kW	1.50
<b>Electric Vehicle Charging Stations (LT VIII)</b>	0.85
<b>HT Category</b>	
<b>HT</b>	
Industry (General)	1.35
Industry (Seasonal)	1.25
Commercial	2.15
Railways/Metro/Monorail	1.35



Category	Z <sub>FAC</sub> for the month of May, 2022 to be levied in July, 2022, August, 2022 September, 2022, October, 2022 and November, 2022 (Rs/kWh, Rs/kVAh, Rs/HP – as Applicable)
Public Water Works (PWW) and Sewage Treatment Plants	1.20
Agricultural - Pumpsets	0.65
Agricultural - Others	1.00
Group Housing Society (Residential)	1.10
Public Services – Government Educations Institutions and Hospitals	1.50
Public Services - Others	1.65
Electric Vehicle Charging Stations	1.00
<b>EHV</b>	
Industry (General)	1.35
Industry (Seasonal)	1.40
Commercial	2.20
Railways/Metro/Monorail	0.80
Public Water Works (PWW) and Sewage Treatment Plants	1.25
Agricultural - Pumpsets	0.65
Group Housing Society (Residential)	1.00
Public Services - Others	1.75

