

# महाराष्ट्र विद्युत नियामक आयोग

# **Maharashtra Electricity Regulatory Commission**

Ref. No. MERC/FAC/2023-24/033

Date: 11 January, 2024

To.

The Managing Director,

Mindspace Business Parks Private Limited,

Plot No- C-30, Block 'G',

Opposite SIDBI,

Bandra Kurla Complex,

Bandra (E), Mumbai - 400 051

Subject:

Post Facto approval of Fuel Adjustment Charges (FAC) submissions of MBPPL for the

months of April 2023, May 2023, and June 2023.

Reference:

1. MBPPL's FAC submission for the months of April 2023, May 2023 and June 2023 vide

email dated 30 August 2023.

2. Data gaps raised vide email dated 20 September 2023.

3. MBPPL's response to queries raised vide email dated 29 September 2023.

Sir,

Upon vetting the FAC calculations for the months of April 2023, May 2023, and June 2023 as mentioned in the above reference, the Commission has accorded approval for charging FAC to its consumers as shown in the table below:

Month	April 2023	May 2023	June 2023
Z <sub>FAC</sub> allowed for recovery (Rs. Crore)	0.000	0.622	0.599

The Commission allows the carry forward FAC of Rs. 1.071 Crore, Rs. 1.111 Crore, and Rs. 0.895 Crore in the months of April 2023, May 2023, and June 2023, respectively. Further, as directed by the Commission, MBPPL shall maintain the monthly account of FAC Fund and upload it on its website to maintain transparency of FAC Fund and also for information of all the stakeholders.

Yours faithfully,

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

Encl: Annexure A: Detailed Vetting Report for the period of April to June, 2023.

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ANNEXURE

**Detailed Vetting Report** 

Date: 11 January, 2024

# POST FACTO APPROVAL FOR FAC CHARGES FOR THE MONTHS OF APRIL 2023, MAY 2023, and JUNE 2023

Subject:

Post facto approval of Fuel Adjustment Charges (FAC) submissions of MBPPL for the months of April 2023, May 2023, and June 2023

Reference:

1. MBPPL's FAC submission for the month of April 2023, May 2023, and June 2023 vide email dated 30 August 2023.

- 2. Data gaps raised vide email dated 20 September 2023.
- 3. MBPPL's response to data gaps vide email dated 29 September 2023.

#### 1. FAC submission by MBPPL Undertaking:

1.1. MBPPL has made FAC submissions for the months of April 2023, May 2023, and June 2023 as referred above. Upon vetting the FAC calculations, taking cognizance of all the submissions furnished by MBPPL, the Commission has accorded post facto approval for the FAC amount to be charged in the billing months of June 2023, July 2023, and August 2023.

# 2. Background

- 2.1. On 31 March, 2023 the Commission has issued Tariff Order in respect of MBPPL (Case No. 216 of 2022) for Truing up of Aggregate Revenue Requirement for FY 2019-20, FY 2020-21 and FY 2021-22, Provisional Truing up for FY 2022-23 and approval of revised estimates of ARR and Tariff for FY 2023-24 and FY 2024-25. Revised Tariff has been made applicable from 1 April, 2023.
- 2.2. Vide its letter dated 20 April, 2020, the Commission communicated the excel formats and guiding principles for filing of FAC submissions to all Distribution Licensees including SEZs. The Commission also directed all Distribution Licensees to submit FAC computations, including details pertaining to variation in fuel cost of generators for the approval of the Commission.
- 2.3. The summary of the FAC Vetting Report approvals granted by the Commission till date is given below:
  - Prior approval of the FAC for the month of April, 2020 vide FAC Vetting Report dated 31 May, 2020.
  - Post-facto approval of the FAC for the months of May and June, 2020 vide FAC Vetting Report dated 9 October, 2020.
  - Post-facto approval to the FAC for the months of July 2020, August 2020 and September 2020 vide FAC vetting Report dated 8 December, 2020.



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- Post-facto approval to the FAC for the months of October 2020, November 2020 and December 2020 vide FAC vetting Report dated 25 March, 2021.
- Post-facto approval to the FAC for the month of January to March, 2021 vide FAC Vetting Report dated 10 June, 2021.
- Post-facto approval to the FAC for the month of April 2021, May 2021 and June 2021 vide FAC Vetting Report dated 11 October, 2021.
- Post-facto approval to the FAC for the month of July to September, 2021 vide FAC Vetting Report dated 5 January, 2022.
- Post-facto approval to the FAC for the month of October 2021, November 2021 and December 2021 vide FAC Vetting Report dated 28 June, 2023.
- Post-facto approval to the FAC for the month of January 2022, February 2022 and March 2022 vide FAC Vetting Report dated 24 July, 2023.
- Post-facto approval to the FAC for the month of April 2022, May 2022 and June 2022 vide FAC Vetting Report dated 02 November, 2023.
- Post-facto approval to the FAC for the month of July 2022, August 2022 and September 2022 vide FAC Vetting Report dated 02 November, 2023.
- Post-facto approval to the FAC for the month of October 2022, November 2022 and December 2022 vide FAC Vetting Report dated 02 November, 2023
- Post-facto approval to the FAC for the month of January 2023, February 2023 and March 2023 vide FAC Vetting Report dated 02 November, 2023
- 2.4. As per provisions of MYT Regulations, 2019 a Distribution Licensee (SEZ) is required to obtain post-facto approval of the Commission on a quarterly basis for FAC charges within 60 days of close of each quarter. Accordingly, vide its letter dated 30 August, 2023, MBPPL has filed FAC submissions for the months of April 2023, May 2023 and June 2023 for post-facto approval. The Commission has scrutinized the submissions provided by MBPPL and has also verified the fuel and power purchase bills provided along with its submissions.

#### 3. Energy Sales of the Licence

- 3.1. In the MTR Order dated 31 March 2023 passed by the Commission in Case No. 216 of 2022, the Commission has approved revised tariffs applicable to MBPPL to maintain zero cross subsidy across tariff categories.
- 3.2. The net energy sales within Licence area as submitted by MBPPL in the FAC submission and as approved by the Commission are as shown in the Table 1 below:



Table 1:	Energy	Sales	approved	and	Actual in MU	Js
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	Approved by	Monthly	Actual Sales (MU)			
Consumer Category	the Commission (MU)	Approved (MU)	Apr- 23	May- 23	Jun- 23	
2.2.1.2.1.2.4.4.2.4.1.2.1.1.1.1.1.1.1.1.	(I)	(II=I/12)	(III)	(IV)	(V)	
HT Category	LINKEL MARE WER		Line in			
HT-I Industrial	48.37	4.03	4.19	4.72	4.51	
HT-II Commercial				/II - II I	-	
LT Category	or Power in June.	of-no/Line 1				
LT-II (A) Commercial (0-20 kW)	0.28	0.02	0.01	0.02	0.01	
LT-II (B) Commercial (above 20 kW)	0.33	0.03	0.03	0.04	0.03	
LT-III (A) Industrial (0-20 kW)	0.40	0.03	0.04	0.04	0.04	
LT-III (B) Industrial (above 20 kW)	7.44	0.62	0.57	0.63	0.63	
LT-IV Electric Vehicle (EV) Charging Stations		-	-	14 12 14	-	
Total	56.81	4.73	4.85	5.44	5.23	

3.3. It can be observed from the above Table 1 that the actual sales during the months of April 2023, May 2023, and June 2023 are 4.85 MU, 5.44 MU, and 5.23 MU respectively, which are 2.34%, 14.86%, and 10.53% higher than the monthly approved energy sales of 4.73 MU by the Commission for the FY 2023-24. The major variation was observed in the HT-I Industrial and LT-III (B) Industrial (above 20 kW) due to seasonal variation in summer season.

#### 4. Power Purchase Details

4.1. MBPPL is a deemed Distribution Licensee notified by the Commission for IT& ITES SEZ located at Airoli, Thane. MBPPL does not own or operate any generating stations. Accordingly, MBPPL is required to procure power from outside sources to fulfil the demand of its consumers.

### 4.2. Approved Power Purchase sources:

- 4.2.1. The KRC DISCOMs have entered into a PPA with GMR Energy Trading Limited (GMRETL) for purchase of 8 MW base load power from the period from 1 November 2022 to 31 October 2023. This PPA has been duly approved by the Commission vide its Order dated 28 October 2022 in Case No. 177 of 2022. The DISCOM wise share of power in the PPA is as follows: (i) GEPL's 1.5 MW; (ii) KRCIPPL 1.5 MW; and (iii) MBPPL 5 MW. The generator identified by GMRETL is Birla Carbon for RTC supply.
- 4.2.2. In its MTR Order dated 31 March 2023 in Case No. 216 of 2022, the Commission has approved the power procurement from GMRETL at an average rate of Rs. 6.35/kWh for RTC power for the period 1 November 2022 to 31 October 2023. However, the month-wise rate of power purchase from GMRETL as approved by the Commission in its Order in Case No. 177 of 2022 varies as follows: (i) April 2023 Rs. 6.70/kWh; (ii) May 2023 Rs. 6.80/kWh; (iii) June 2023 Rs. 6.40/kWh.
- 4.2.3. Accordingly, MBPPL has purchased RTC power from GMR Energy Trading Limited (GMRETL) at the rates of Rs. 6.72/kWh in the month of April 2023, Rs. 6.82/kWh in the month of May 2023 and Rs. 6.42/kWh in the month of June 2023.



- 4.3. Further, MBPPL has also procured RE power through IEX in the GDAM and GTAM, and PXIL in GTAM during the months of April 2023, May 2023, and June 2023. MBBPL purchased nil MUs of Solar power and 2.70 MUs of Non-Solar Power in April 2023 at an average rate of Rs. 8.16/kWh. Similarly, MBBPL purchased 1.21 MUs and 1.60 MUs of Solar and Non-Solar Power in May 2023 at an average rate of 6.79/kWh and 6.02/kWh, respectively. Similarly, MBBPL purchased 1.76 MUs and 0.85 MUs of Solar and Non-Solar Power in June 2023 at an average rate of Rs. 5.79/kWh and Rs. 6.20/kWh, respectively.
- 4.4. The Commission notes that MBPPL has purchased RE power through the power exchanges to meet the RPO obligations in the months of April 2023, May 2023, and June 2023. The power purchase has been through the power exchanges where the prices are market driven and competitively discovered. The Commission in the MTR Order in Case no. 216 of 2022 has approved the RE procurement upto the RPO percentage stipulated in the Regulations for FY 2023-24 and FY 2024-25 and the tariff of RE sources is considered as Rs. 4.90 per unit which is weighted average rate of GDAM for the period of July to December 2022.
- 4.5. MBPPL has also procured 0.01 MUs and 0.02 MUs of power from the Power Exchange at average rates of Rs. 10.91/kWh and Rs. 11.04/kWh, during the months of May 2023 and June 2023, respectively. MBBPL has fulfilled its total load requirement by procuring power from power exchanges under its various products GDAM/GTAM/LDC for green power requirements and TAM, DAM, and RTM for conventional power apart from contracted power from GMRETL.

#### 4.6. Summary of power purchase of MBPPL is as under:

Sr. No.	Particular	Compliance
1	Purchase from approved sources	Yes. In order dated 28 October, 2022 in Case No. 177 of 2022 the Commission has approved for combined power procurement of 8 MW RTC for period from 1 November, 2022 to 31 October, 2023. Further, in the MTR Order dated March 31, 2023, in Case No. 216 of 2022, the Commission has approved a combined power procurement of 8 MW RTC for the three KRC DISCOMs, effective until October 31, 2023. In line with the aforesaid order MBPPL has procured power from GMRETL and through various products of power exchange.
2	Merit Order Dispatch	<b>Yes.</b> MBPPL procures power on short term basis whereby there is one generator (GMRETL – Birla Carbon) to cater base power for RTC. Further, MBPPL met its peak power requirement through various product from power exchange which is in line with MOD principles.
3	Fuel Utilization Plan	<b>Not applicable.</b> All the sources of power procurement fall under Section 63 of EA, 2003.
4	DSM Pool	MBPPL injected 0.66 MUs, 0.34 MUs and 0.26 MUs in the months of April 2023, May 2023, and June 2023 into the DSM pool.
5	Sale of Surplus Power	There was no sale of surplus power in the months of April 2023 to June 2023.



Sr. No.	Particular	Compliance						
6	Power Purchase	Al .	y 2023, and	MUs, 5.68 MUs and 5.47 MUs in month and June 2023, respectively, as again ase of 4.94 MUs.				
7	Source wise Power Purchase	Source Name	Approved (MU)	Actual Apr 2023 (MU)	Proportion of each Source in Actual Purchase (%)			
	of the fill of howen	RE Solar	0.52	-	0%			
		RE Non-Solar	0.57	2.70	53%			
		Peak sources (GMR STPP)	1.82	3.03	60%			
		Exchange/ Other Peak Source/New Source	2.03	0.00	0%			
		DSM Pool	-	(0.66)	-13%			
		Total	4.94	5.07	100%			
		Source Name	Approved (MU)	Actual May 2023 (MU)	Proportion of each Source in Actual Purchase (%)			
		RE Solar	0.52	1.21	21%			
		RE Non-Solar	0.57	1.60	28%			
		Peak sources (GMR STPP)	1.82	3.21	56%			
		Exchange/ Other Peak Source (PTC)/New Source	2.03	0.01	0%			
		DSM Pool	-	(0.34)	-6%			
	Super Guent Alac	Total	4.94	5.68	100%			
	SC boost word on above Scale of the Sustantin	Source Name	Approved (MU)	Actual Jun 2023 (MU)	Proportion of each Source in Actual Purchase (%)			
		RE Solar	0.52	1.76	32%			
		RE Non-Solar	0.57	0.85	16%			
	And restored in Alline Section	Peak sources (GMR STPP)	1.82	3.10	57%			
	Performance of Participation	Exchange/ Other Peak Source/New Source	2.03	0.02	0%			
	Feb. 37 177 34	DSM Pool	0.00	(0.26)	-5%			
	promise at the broad	Total	4.94	5.47	100%			
	A STATE OF THE STATE OF T	by the Commission vior 2022. Subsequently No. 216 of 2022, the	he period up to ide its Order d y, in the MTR Commission	o 31 October, ated 28 Octob Order dated has approved	MW RTC for the three 2023 was duly approve per 2022 in Case No. 17 March 31, 2023, in Case the power procurement share of MBBPL in the			



Sr. No.	Particular	Compliance
	to an potterno est	RE procurement is approved at a rate of Rs. 4.90/kWh which is weighted average rate of GDAM for the period of July to December 2022.
8	Power Purchase under Section 63 of Electricity Act, 2003	Monthly power purchase invoices are submitted by MBPPL. Monthly power purchase quantum and rate are verified from the invoices, and it is ensured that same has been considered in the FAC calculation.

# 5. Power Purchase Cost:

- 5.1. The Commission has scrutinised the detailed bills/invoices submitted for power purchase during the month of April 2023, May 2023, and June 2023 to verify the claim of MBPPL regarding Average Power Purchase Cost (APPC). The Commission has verified the actual as well as approved Net Purchase (MUs), Variable Cost (Rs. /kWh) and Power Purchase Cost considered in FAC computation from the invoices and applicable MTR Order respectively.
- 5.2. The Power Purchase Cost incurred in April 2023, May 2023 and June 2023 is **Rs. 3.94 Crores**, **Rs. 3.86 Crores** and **Rs. 3.46 Crores**, respectively which is significantly higher than the monthly approved Power Purchase cost of **Rs. 2.79 Crores** by the Commission. The power purchase cost is higher than approved cost on account of higher power sales and corresponding higher procurement of power.
- 5.3. Short Term Source: The KRC DISCOMs have entered into a PPA with GMR Energy Trading Limited (GMRETL) for purchase of 8 MW base load power from the period from 1 November 2022 to 31 October 2023. This PPA has been duly approved by the Commission vide its Order dated 28 October 2022 in Case No. 177 of 2022. Subsequently, the Commission in MTR Order dated 31 March 2023 in Case no. 216 of 2022 has approved the power procurement from this source until 31 October 2023. MBPPL procured 3.03 MUs, 3.21 MUs and 3.10 MUs of conventional power from GMRETL in the months of April 2023, May 2023, and June 2023, respectively. Average rates of power purchase are Rs. 6.72/kWh in April 2023, Rs. 6.82/kWh in May 2023, and Rs. 6.42/kWh in June 2023.
- 5.4. Power procurement through Exchange and Other Peak Resource: KRCIPPL procured nil quantum of power through exchange platforms in the month of April 2023. However, KRCIPPL has procured 0.01 MUs, and 0.02 MUs of power from Power Exchange at average rates of Rs. 10.91/kWh and Rs. 11.04/kWh during the months of May 2023, and June 2023, respectively. The average rate of power purchase through power exchange is much higher than the approved rate of Rs. 5.40/kWh, though the quantum procured is miniscule at 0.01 MUs and 0.02 MUs. The trends observed in the power exchange in the respective months as shown in the below figure.



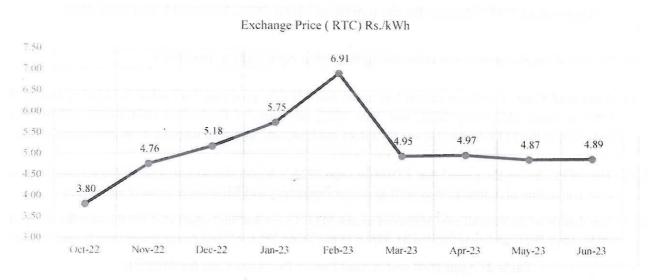


Figure 1: Exchange price trends (RTC)

- 5.5. Renewable Sources: The Commission has approved Rs. 0.53 Crores each for April 2023, May 2023, and June 2023 for purchase of RE power to meet the Renewable Purchase Obligation (RPO). MBPPL has purchased RE Non-Solar during the month of April 2023, and RE Solar and RE Non-Solar during the months of May 2023, and June 2023. The RE Solar purchase quantum was 1.21 MUs and 1.76 MUs at a power purchase rate of Rs. 6.79/kWh and Rs. 5.79/kWh in the months of May 2023, and June 2023, respectively. Similarly, the RE Non-Solar purchase quantum was 2.70 MUs, 1.60 MUs, and 0.85 MUs at an average power purchase rate of Rs. 8.16/kWh, Rs. 6.02/kWh, and Rs. 6.20/kWh in the months of April 2023, May 2023, and June 2023, respectively.
- 5.6. MBPPL has sourced the RE Solar and RE Non-Solar power from the exchange (GDAM, GTAM and LDC) to meet the RPO obligation.
- 5.7. The APPC for solar and non-solar sources are higher than approved rate of Rs. 4.90 /kWh for solar and non-solar sources in the months of April 2023, May 2023, and June 2023. The Commission notes that the price of power is competitively discovered for power procured through power exchange and MBPPL has provided all the necessary supporting documents for verification of the cost. Accordingly, the Commission approves inclusion of the power purchased from RE sources for recovery through the RE sources for recovery through the FAC mechanism.
- 5.8. **DSM Pool:** MBPPL has injected 0.66 MUs during April 2023, 0.34 MU during May 2023, and 0.26 MU during June 2023 into the DSM pool. The Commission has also considered the average price of the power in the DSM pool (Rs. 4.69/kWh, Rs. 3.58/kWh and Rs. 3.74/kWh) as submitted by the Licensee for FAC computation along with the supporting documentation for the months April 2023, May 2023, and June 2023, respectively.
- 5.9. The Commission has noted that MBPPL has followed Merit Order Dispatch for scheduling of power and all sources are scheduled according to SLDC instructions.



- 5.10. No sale of surplus power was done during the period April 2023 to June 2023.
- 5.11. **Approved Cost**: The Commission has noted that MBPPL procured 3.03 MUs, 3.21 MUs, and 3.10 MUs in April 2023, May 2023, and June 2023, respectively, from short term source (GMRETL) approved in the MTR Order. However, it does not have any approved medium-term contracted source.
- 5.12. The APPC during the period April 2023 to June 2023 is higher due to purchase of higher cost power, both conventional (contracted as well as power exchange) and RE sources (power exchange).
- 5.13. The details of the overall cost approved as per MTR Order and the actual cost for the months of April 2023, May 2023, and June 2023 is as shown in the Table 2Error! Reference source not found. below:

Table 2: Approved and Actual Power Purchase Cost for MBPPL

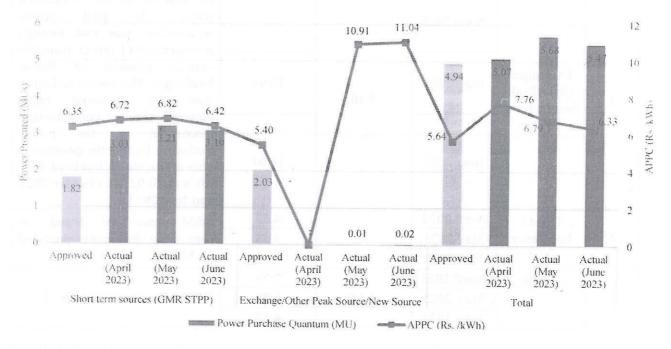
Source	M	Ionth	Power Purchase Quantum (MU)	Fixed Cost (Rs. Crore)	Fixed Cost (Rs./ kWh)	Variable Cost (Rs. Crore)	Variable Cost (R\$./ kWh)	Total Cost (Rs. Crore)	APPC (Rs./ kWh)
Short term sources (GMR STPP)	App	proved	1.82	-	-	1.16	6.35	1.16	6.35
	Actual (	April 2023)	3.03	-	-	2.04	6.72	2.04	6.72
	Actual (	(May 2023)	3.21	-	-	2.19	6.82	2.19	6.82
	Actual (	(June 2023)	3.10	-	-	1.99	6.42	1.99	6.42
Exchange/	App	proved	2.03	-	-	1.10	5.40	1.10	5.40
Other Peak	Actual (	April 2023)		-	-	-	-	-	-
Source/New	Actual (	(May 2023)	0.01		-	0.01	10.91	0.01	10.91
Source	Actual (June 2023)		0.02	-	-	0.02	11.04	0.02	11.04
	A nnwo	RE Solar	0.52	-	-	0.25	4.9	0.25	4.9
	Appro ved	RE Non- Solar	0.57		0	0.28	4.9	0.28	4.9
	Actual	Solar	0.00		-1	0.00	0.00	0.00	0.00
Solar & Non- Solar	(April 2023)	Non-Solar	2.70	alegen	7 -	2.21	8.16	2.21	8.16
RE/REC	Actual	Solar	1.21		-	0.82	6.79	0.82	6.79
RE/REC	(May 2023)	Non-Solar	1.60	-		0.96	6.02	0.96	6.02
	Actual	Solar	1.76	-	-	1.02	5.79	1.02	5.79
	(June 2023)	Non-Solar	0.85	-	-	0.53	6.20	0.53	6.20
	Apı	proved		7	m.v.	ealing in	Amire 25	-	-
DSM / Dool	Actual (	April 2023)	(0.66)	-	- 1	(0.31)	4.69	(0.31)	4.69
DSM / Pool	Actual (	(May 2023)	(0.34)	-	-	(0.12)	3.58	(0.12)	3.58
	Actual (	(June 2023)	(0.26)	2002.00	-	(0.10)	3.74	(0.10)	3.74
	Apj	proved		Berti - XII	# 19 <u>.</u> EM	Metals 15 I		1 11 11	
SI DC For	Actual (	April 2023)	=	0.00	-	9		0.00	-
SLDC Fee	Actual (	(May 2023)	-	0.00	-	-	-	0.00	=
	Actual (	(June 2023)	-	0.00	-	-	-	0.00	-
Total	Apı	proved	4.94		CTRICKLY	2.79	5.64	2.79	5.64

Source	Month	Power Purchase Quantum (MU)	Fixed Cost (Rs. Crore)	Fixed Cost (Rs./ kWh)	Variable Cost (Rs. Crore)	Variable Cost (Rs./ kWh)	Total Cost (Rs. Crore)	APPC (Rs./ kWh)
	Actual (April 2023)	5.07	0.00	0.00	3.94	7.76	3.94	7.76
	Actual (May 2023)	5.68	0.00	-	3.86	6.79	3.86	6.79
	Actual (June 2023)	5.47	0.00	-	3.46	6.33	3.46	6.33

<sup>\*</sup>KRC has to pay fixed short term open access charges irrespective of quantum of power purchase and hence per unit rate is higher

5.14. The variation in approved and actual quantum of power procured for some of the key sources and the APPC is shown the graph below:

Figure 2: Variation in Power Procurement Quantum and APPC



5.15. Reasons for the rate variation for various sources are as shown below:

Table 3: Reasons for Rate Variation for various Sources

Sr. No.	Source	Month	Approved Rate (Rs. /kWh)	Actual Rate (Rs. /kWh)	Reason for rate variation
41.7.70 41.2.76	Peak	April 2023	e seek alling to e	6.72	MBPPL procured power from GMRETL based on the PPA which was duly approved by the
1	sources (GMR	May 2023	6.35	6.82	Commission vide its Order dated 28 October 2022 in Case No. 177
acquiti	STPP)	June 2023	eit yi pin birih	6.42	of 2022 and considered as part of the power sources in MTR Order in Case No. 216 of 2022.



Sr. No.	Source	Month	Approved Rate (Rs. /kWh)	Actual Rate (Rs. /kWh)	Reason for rate variation
		A:1 2022		·-	
		April 2023	4.90 (Solar)	8.16 (NS)	Market discovered rate: RF
Solar & Non-Solar RE/REC	May 2022	( ,	6.79 (S)	power was purchased during the	
	May 2023	4.90 (non-	6.02 (NS)	period from April 2023 to June 2023 from Power Exchange	
	June 2023	Solar)	5.79 (S)	(GDAM, GTAM, and LDC).	
	June 2023		6.20 (NS)		
		April 2023			In addition to the contracted power, the peak power requirement was met through procurement of power from the
3	Exchange/ Other Peak Source/New	May 2023	5.40	10.91	various products of Power Exchange. The rates are higher than the approved rates.
Source		June 2023		11.04	however, they are competitively discovered in the powe exchange. Further the quantum is also miniscule at levels of 0.01 MUs and 0.02 MUs in May 2023 and June 2023.
	DSM /	April 2023		4.69	DSM rates are based on
4	Imbalance	May 2023	1=	3:58	supporting documents provided
	Pool	June 2023		3.74	by MBPPL.
	Total	April 2023		7.76	
6		May 2023	5.64	6.79	Due to the above factors
		June 2023	*	6.33	

5.16. Considering the above, the Commission allows the average power purchase cost of Rs. 7.76/kWh, Rs. 6.79/kWh and Rs. 6.33/kWh for the months of April 2023, May 2023, and June 2023, respectively as shown in Table 3 above. The variation in power purchase cost is on the higher side in April 2023, May 2023, and June 2023 due to the higher cost of RE and conventional power purchase from GMRETL.

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

- 6.1. The Commission has worked out the average power purchase costs for the months of April 2023, May 2023, and June 2023 as shown in Table 2 3 above. The same has been compared with the average power purchase cost approved by the Commission in MTR Order dated 31 March 2023 in Case no. 216 of 2022 to arrive at differential per unit rate at which Z<sub>FAC</sub> is to be passed on to the consumers.
- 6.2. Thus, the following Table 4 shows the Z<sub>FAC</sub> worked out by the Commission on account of difference in power purchase cost for the month of April 2023, May 2023, and June 2023, respectively.

Table 4: FAC on account of Fuel and Power Purchase Cost

Sr. No.	Particulars	Units	Apr- 23	May- 23	Jun- 23
1	Average power purchase cost approved by the Commission	Rs. /kWh	5.64	5.64	5.64
2	Actual average power purchase cost	Rs. /kWh	7.76	6.79	6.33
3	Change in average power purchase cost (=2 -1)	Rs. /kWh	2.12	1.15	0.69
4	Net Power Purchase	MU	5.07	5.68	5.47
5	Change in power purchase cost (=3 x 4/10)	Rs. Crore	1.07	0.65	0.38

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

7.1. The adjustment factor for over recovery / under recovery (B) is as shown in the Table 5 below:

Table 5: Adjustment for over recovery/under recovery

S. No.	Particulars	Units	Apr- 23	May- 23	Jun- 23
1.1	Incremental cost allowed to be recovered in Month n-4	Rs. Crore	hu.n	iz i <del>-</del> ning	-
1.2	Incremental cost in Month n-4 actually recovered in month n-2	Rs. Crore	ping 5	il e <sup>z</sup> nei	
1.3	(over-recovery)/under-recovery (=1.2 - 1.1)	Rs. Crore	-		-
2	Carried forward adjustment for over-recovery/under- recovery attributable to application of ceiling limit for previous month	Rs. Crore	orga <del>s</del> ota	1.07	1.11
3	Adjustment factor for over-recovery/under-recovery (1.3+2.0)	Rs. Crore	501 <b>.</b>	1.07	1.11

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

- 8.1. Carrying/Holding Cost for under recovery/over recovery has been granted at the approved interest rate for the eligible amount which works out to **nil for April 2023** (being the first month after issuance of MTR Order) and **Rs. 0.01 Crores** for each of the months of May 2023 and June 2023.
- 8.2. Holding cost for the month of April 2023 to June 2023 is calculated by considering one-year MCLR + 150 basis points which turns out to be 10.00%, 10.00% and 10.00% for April 2023, May 2023, and June 2023 respectively.
- 8.3. The Commission has computed the holding cost towards the amount under recovered in the month of April 2023 to June 2023 which is as shown in Table below:



Table 6: Carrying/Holding Cost for over/under recovery

Particulars	Units	Apr-23	May-23	Jun-23
Adjustment factor for over-recovery/under-recovery	Rs. Crore	- 1111	1.07	1.11
Interest rate	%	10.00%	10.00%	10.00%
Carrying cost for over-recovery/under-recovery	Rs. Crore	020 <del>1</del> 550	0.01	0.01

# 9. Holding Cost for FAC Fund

- 9.1. The Commission in its FAC approval for the month of March 2021 has decided to accumulate the FAC fund arising out of negative monthly FAC up to March 2023 along with the holding cost. The Commission decided to continue with same principle for the FY 2023-24 and FY 2024-25 as well as per decision outlined in the MTR Order in Case No.216 of 2022. Accordingly, as per said principle laid down by the Commission, MBPPL will carry forward the negative FAC amount and accumulate the same in the FAC Fund along with holding cost, as applicable.
- 9.2. The Commission has determined positive FAC of **Rs. 1.071 Crores**, **Rs. 1.733 Crores and Rs. 1.494 Crores** for the months of April 2023, May 2023, and June 2023, respectively. There was no FAC fund available at the beginning of April 2023. Further, the Commission has determined positive FAC for the month of April 2023, May 2023, and June 2023, accordingly, the FAC fund of **nil** amount has been approved at end of month from April 2023 to June 2023.
- 9.3. The Commission has considered one-year MCLR rate declared by SBI from time to time plus 150 basis points which works out to be 10.00% for April 2023, May 2023, and June 2023 respectively. Considering that the FAC fund approved by the Commission is nil holding cost for the months April 2023, May 2023, and June 2023 to be contributed to the FAC Pool.

#### 10. Disallowance due to excess Distribution Loss

10.1. 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."

10.2. The following Table provides the comparison of approved and actual distribution loss and disallowance due to excess distribution loss:

Table 7: Disallowance of FAC due to excess distribution loss

Sr. No.	Particulars	Units	Approved in Tariff Order	Apr-23	May-23	Jun-23
100	Net Energy input at Distribution Voltages	MU	4.78	4.91	5.50	5.29
2	Energy sales at Distribution voltages	MU	4.73	4.85	5.44	5.23
3	Distribution Loss (1 - 2)	MU	0.05	0.07	0.06	0.06
4	Distribution Loss as % (3/1)	%	0.97%	1.36%	1.11%	1.12%
5	Annual Sliding Distribution Loss	%		1.16%	1.10%	1.13%
6	Excess Distribution Loss = [Annual Sliding Distribution Loss - Distribution loss approved] x Net Energy Input (1)	MU	whole visiting	0.01	0.01	0.01
7	Disallowance of FAC due to excess Distribution Loss	Rs. Crore	Egi <u>d</u> i perce	0.00	0.00	0.00

- 10.3. As seen from the above Table, the annual sliding distribution loss for the months of April 2023 to June 2023 is 1.16%, 1.10% and 1.13%, respectively, which is higher than the distribution loss of 0.97% approved in the MTR Order. The monthly distribution loss for the months of April 2023 to June 2023 is also higher than the MYT approved distribution loss of 0.97%.
- 10.4. The Commission observed that MBPPL has worked out disallowance of FAC due to excess Distribution Loss based on the annual distribution loss and the annual sliding Distribution corresponding to the standalone energy input at distribution voltage for the month of April 2023, May 2023, and June 2023. Though the standalone FAC for all these months is positive, MBPPL has considered Rs. 0.01 Crore, Rs. 0.01 Crore and Rs. 0.01 Crore of disallowance of FAC due to excess Distribution loss for months of April 2023, May 2023, and June 2023. Since the month wise annual sliding loss are higher than the approved distribution loss and also considering that the FAC for the relevant months is positive, the Commission has considered disallowance of FAC due to excess distribution loss, for the purpose of approval.



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

11.1. The summary of the FAC amount as approved by the Commission for the month of April 2023, May 2023, and June 2023 which is allowed to be recovered in the billing month of June 2023, July 2023, and August 2023 is as shown in the Table 6 below.

Table 6: Summary of Allowable ZFAC

Sr. No. Particulars		Units	Apr- 23	May- 23	Jun- 23
1	Calculation of Z <sub>FAC</sub>				1
1.1	Change in cost of generation and power purchase attributable to Sales within the License Area (F)	Rs. Crore	1.073	0.655	0.376
1.2	Carrying cost for over-recovery/under-recovery (C)	Rs. Crore	7-11	0.009	0.009
1.3	Adjustment factor for over-recovery/under-recovery (B)	Rs. Crore	wn <u>-</u>	1.071	1.111
1.5	$Z_{FAC} = F + C + B \qquad .$	Rs. Crore	1.073	1.735	1.496
2	Calculation of FAC Charge				
2.1	Energy Sales within the License Area	MU	4.845	5.438	5.233
2.2	Excess Distribution Loss	MU	0.009	0.007	0.008
2.3	ZFAC per kWh *	Rs./kWh	2.211	3.187	2.855
2.4	Cap at 20% of variable component of tariff	Rs./kWh	1.303	1.303	1.303
2.5	FAC Charge allowable (Minimum of 2.3 and 2.4)	Rs./kWh	1.303	1.303	1.303
3	Recovery of FAC				
3.1	FAC disallowed corresponding to excess Distribution Loss [((2.1+2.2) x 2.3)/10]	Rs. Crore	0.002	0.002	0.002
3.2	Allowable FAC	Rs. Crore	1.071	1.733	1.494
4	Utilization of FAC Fund				
4.1	Opening Balance of FAC Fund	Rs. Crore	-	-	-
4.2	Holding Cost on FAC Fund	Rs. Crore	-	-	-
4.3	Z <sub>FAC</sub> for the month (Sr. No. 3.2)	Rs. Crore	1.071	1.733	1.494
4.4	Closing Balance of FAC Fund	Rs. Crore	11.	in Lyn	_
4.5	Z <sub>FAC</sub> leviable/refundable to consumer	Rs. Crore	1.071	1.733	1.494
5	Total FAC based on category wise and slab wise allowed to be recovered	Rs. Crore		0.622	0.599
6	Carried forward FAC for recovery during future period (3.1-3.2-4)	Rs. Crore	1.071	1.111	0.895



- 11.2. It can be seen from the above Table 6 that the standalone FAC for the month of April 2023, May 2023 and June 2023 is Rs. 1.073 Crores, Rs. 1.735 Crores, and Rs. 1.496 Crores respectively. Based on energy sales and excess distribution loss, FAC per unit has been worked out as Rs. 2.211/kWh, Rs. 3.187/kWh and Rs. 2.855/kWh for the months of April 2023, May 2023, and June 2023, respectively as shown above.
- 11.3. Further, the Regulation 10.9 of MYT Regulations, 2019 specifies as:

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

- 11.4. The FAC in April 2023, May 2023, and June 2023 is positive and hence same is adjusted in the FAC fund being maintained by MBPPL. As the FAC per unit computed in the months of April 2023, May 2023 and June 2023 as shown in Table 6 above are higher than the 20% cap (Rs. 1.303/kWh) specified in MYT Regulations, 2019, hence, there is restriction triggered with regards to such ceiling.
- 11.5. Accordingly, considering the ceiling limit (Rs. 1.303/kWh) at 20%, the FAC recoverable will be lower. Consequently, due to ceiling limit (Rs. 1.303/kWh), the FAC recoverable has been worked out as Rs. 1.071 Crores, Rs. 1.733 Crores and Rs. 1.494 Crores for the month of April 2023, May 2023, and June 2023, respectively.
- 11.6. However, after completion of the month of April 2023, MBPPL had filed its application seeking prior approval of the Commission for levy of FAC charges in line with the provisions of the MERC MYT Regulations, 2019. The relevant provision is reproduced below:

"10.2 The aggregate gain or loss to a Distribution Licensee on account of variation in cost of fuel, power purchase, and inter-State Transmission Charges, covered under Regulation 9.1. shall be passed through under the Fuel Adjustment Charge (FAC) component of the Z-factor Charge (ZFAC), as an adjustment in its Tariff on a monthly basis, as specified in these Regulations and as may be determined in orders of the Commission passed under these Regulations, and shall be subject to ex-post facto approval by the Commission on a quarterly basis:

Provided that the ZFAC for the first month of the first year of the Control Period shall require the prior approval of the Commission, based on prudence check;

Provided further that the Distribution Licensee shall submit, in the stipulated formats, details of the variation between expenses incurred and those approved by the Commission, and the detailed computations and supporting documents as may be required for verification by the Commission for the first month of the first year of the Control Period, for prior approval of ZFAC;

Provided also that the Distribution Licensee shall submit the details of variation in fuel costs relating to power generated from own generation Stations and cost of power procured, and inter-State Transmission Charges for the first month of the first year of the Control Period, after completion of the first month.



- 11.7. However, as can be seen from the above extract, the Commission observed that the prior approval is required only in the case of submissions for the first month of the first year of the Control Period and for remaining months the ex-post facto approval is required. The month of April 2023 is the first month after the issue of the MTR Order, however, it is not the first month of the Control period and hence no prior approval is required for levy of FAC by the licensee. Considering the provision of the MYT Regulation, 2019, the licensee was directed to file an application of post facto approval for the first quarter. Considering the above situation, licensee was not able to levy the FAC charges for the month of April 2023 on the consumer and hence the FAC for the month was carried forward to the future period for recovery
- 11.8. Thus, considering the ceiling limit of 20% of variable component of tariff and the matter discussed in the preceding paragraph, FAC equivalent Rs. 1.071 Crores (i.e., Rs. 1.071 Crores minus nil) for the month of April 2023, Rs. 1.111 Crores (i.e., Rs. 1.733 Crores minus Rs. 0.622 Crores) for the month of May 2023, and Rs. 0.895 Crores (i.e., Rs. 1.494 Crores minus Rs. 0.599 Crores) for the month of June 2023 has remained unrecovered which will be recovered as part of FAC of upcoming months.
- 11.9. The was nil FAC fund available at the beginning of April 2023 and no FAC fund was created during the period from April 2023 to June 2023, accordingly, the Commission has also approved nil holding cost on the FAC Fund during the months of April 2023 to June 2023. The Commission has determined a positive FAC of Rs. 1.071 Crores, Rs. 1.733 Crores and Rs. 1.494 Crores for the months of April 2023, May 2023, and June 2023, respectively. Accordingly, the positive FAC determined by the Commission for April 2023, May 2023, and June 2023 is recoverable from the consumers. The recovery during each month will be subject to the cap of 20% of variable component of tariff.

#### 12. Recovery from Consumers:

12.1. Regulation 10.9 of MERC 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  $Z_{FAC}$  per kWh for a particular Tariff category/sub-category/consumption slab shall be computed as per the following formula: —

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

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

k = Average Billing Rate / ACOS;

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



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

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

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

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

- 12.2. The Commission has worked out FAC per unit for each category of consumer based on the formula provided in the above Regulations.
- 12.3. The following Table 7Error! Reference source not found. shows per unit Z<sub>FAC</sub> for the month April 2023, May 2023, and June 2023 to be levied on consumers of MBPPL in the billing month of June 2023, July 2023, and August 2023.

Table 7: Category wise FAC Revenue for billing month June 2023, July 2023, and August 2023

Sr. No	Consumer Category	Slabs	ZFAC computed for the month of June 2023 (Rs. Crore)	ZFAC computed for the month of July 2023 (Rs. Crore)	ZFAC computed for the month of August 2023 (Rs. Crore)
	HT Category				
1	HT- I Industrial	all units	-	0.533	0.509
2	HT-II Commercial	all units	-	_	
	LT Category				
3	LT-II(A) Commercial (0-20 kW)	all units	-	0.002	0.002
4	LT-II (B) Commercial (above 20 kW)	all units	· -,	0.003	0.002
5	LT-III (A) Industrial (0- 20 kW)	all units	-	0.006	0.006
6	LT-III (B) Industrial (above 20 kW)	all units	-	0.079	0.080
7	LT-IV – Electric Vehicle (EV) Charging Stations	all units	-		-
	Total FAC Recovery (Rs. Crore)		-	0.622	0.599

<sup>#</sup> The reason for non-levy of FAC for the month of April 2023 is discussed in paragraphs Error! Reference source not found. and 11.7 of the report.



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