

महाराष्ट्र विद्युत नियामक आयोग

Maharashtra Electricity Regulatory Commission

Ref. No. MERC/FAC/2023-24/0176/

Date: 11 March, 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 July 2023, August 2023, and September 2023.

Reference:

1. MBPPL's FAC submission for the months of July 2023, August 2023, and September

2023 vide email dated 01 December 2023.

2. Data gaps raised vide email dated 23 December 2023.

3. MBPPL's response to queries raised vide email dated 23 January 2024.

Sir,

Upon vetting the FAC calculations for the months of July 2023, August 2023, and September 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	July 2023	August 2023	September 2023
Z _{FAC} allowed for recovery (Rs. Crore)	0.539	0.278	0.055

The Commission allows the carry forward FAC of Rs. 0.440 Crore, Rs. 0.018 Crore, and Rs. 0.004 Crore in the months of July 2023, August 2023, and September 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 the information of all the stakeholders.



Yours faithfully,

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

Encl: Annexure A: Detailed Vetting Report for the period of July to September 2023.

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ANNEXURE

Detailed Vetting Report Date: 11 March, 2024

POST FACTO APPROVAL FOR FAC CHARGES FOR THE MONTHS OF JULY 2023, AUGUST 2023, AND SEPTEMBER 2023

Subject:

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

months of July 2023, August 2023, and September 2023

Reference:

1. MBPPL's FAC submission for the months of July 2023, August 2023, and September 2023 vide email dated 01 December 2023.

2. Data gaps raised vide email dated 23 December 2023.

3. MBPPL's response to queries raised vide email dated 23 January 2024.

1. FAC submission by MBPPL Undertaking:

1.1. MBPPL has made FAC submissions for the months of July 2023, August 2023, and September 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 September 2023, October 2023, and November 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.
 - 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.



Approval of FAC Charges for the months of July 2023, August 2023, and September 2023

- 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.
- Post-facto approval to the FAC for the month of April 2023, May 2023 and June 2023 vide FAC Vetting Report dated 11 January, 2024.
- 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 1 December 2023, MBPPL has filed FAC submissions for the months of July 2023, August 2023, and September 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 the Licence area as submitted by MBPPL in the FAC submission and as approved by the Commission are as shown in Table 1 below:



Consumer Category	Approved by the	Monthly Approved	Actual Sales (MU)			
	Commission (MU)	(MU)	Jul-23	Aug-23	Sep-23	
	(I)	(II=I/12)	(III)	(IV)	(V)	
HT Category						
HT-I Industrial	48.37	4.03	4.08	4.28	4.02	
HT-II Commercial	-	() = () = ()	-	-	-	
LT Category	1,					
LT-II (A) Commercial (0-20 kW)	0.28	0.02	0.01	0.01	0.01	
LT-II (B) Commercial (above 20 kW)	0.33	0.03	0.03	0.03	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	0.55	0.57	0.54	
LT-IV Electric Vehicle (EV) Charging Stations		-	-	-	-	
Total	56.81	4.73	4.71	4.93	4.64	

Table 1: Energy Sales approved and Actual in MUs

3.3. It can be observed from the above Table 1 that the actual sales during the months of July 2023, and September 2023 are 4.71 MU and 4.64 MU respectively, which are 0.45% and 1.98% lower than the monthly approved energy sales of 4.73 MU by the Commission for the FY 2023-24. However, the actual sales during the months of August 2023 is 4.93 MU, which is 4.13% 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 LT-II (A) Commercial (0-20 kW) and LT-III (B) Industrial (above 20 kW).

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) July 2023 Rs. 5.99/kWh; (ii) August 2023 Rs. 6.20/kWh; (iii) September 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. 6.01/kWh in the month of July 2023, Rs. 6.22/kWh in the month of August 2023 and Rs. 6.42/kWh in the month of September 2023.



- 4.3. Further, MBPPL has also procured RE power through IEX (GDAM and GTAM), PXIL, and MPL through bilateral mode of transaction during the months of July 2023, August 2023, and September 2023. MBBPL purchased 1.55 MUs of Solar power and 0.69 MUs of Non-Solar Power in July 2023 at an average rate of Rs. 4.19/kWh and Rs. 7.21/kWh. Similarly, MBBPL purchased 0.50 MUs and 1.91 MUs of Solar and Non-Solar Power in August 2023 at an average rate of 6.67/kWh and 3.37/kWh, respectively. Similarly, MBBPL purchased 0.68 MUs and 1.28 MUs of Solar and Non-Solar Power in September 2023 at an average rate of Rs. 7.04/kWh and Rs. 4.23/kWh, respectively.
- 4.4. The Commission notes that MBPPL has also purchased RE power through the power exchanges and Manikaran Power Limited to meet the RPO obligations in the months of July 2023 to September 2023. The power purchase has been through 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 up to 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 0.08 MUs, 0.01 MUs and 0.08 MUs of power from the Power Exchange at average rates of Rs. 6.56/kWh, Rs. 9.26/kWh and Rs. 8.10/kWh, during the months of July 2023, August 2023, and September 2023, respectively. MBBPL has fulfilled its total load requirement by procuring power from power exchanges under its various products GDAM/GTAM for green power requirements apart from contracted power from Manikaran Power Limited 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	Yes. 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	Not applicable. All the sources of power procurement fall under Section 63 of EA, 2003.
4	DSM Pool	MBPPL injected 0.46 MUs and 0.07 MUs in the months of July 2023 and August 2023 into the DSM pool. MBPPL has drawn 0.13 MUs in the month of September 2023 from the DSM pool.
5	Sale of Surplus Power	MBBPL has sold surplus power of 0.11 MUs and 0.03 MUs in month of August 2023 and September 2023



Sr. No.	Particular	Compliance						
6	Power Purchase	2023, August 2023, a	Actual Power Purchase is 4.92 MUs , 5.45 MUs , and 5.20 MUs in months of Ju 2023, August 2023, and September 2023, respectively, as against approvementally power purchase of 4.94 MUs .					
7	Source wise Power							
	Purchase	Source Name	Approved (MU)	Actual Jul 2023 (MU)	Proportion of each Source in Actual Purchase (%)			
		RE Solar	0.52	1.55	31%			
		RE Non-Solar	0.57	0.69	14%			
		Peak sources (GMR STPP)	1.82	3.06	62%			
		Exchange/ Other Peak Source/New Source	2.03	0.08	2%			
		DSM Pool	_	(0.46)	-9%			
		Sale of Surplus Power		-	-			
		Total	4.94	4.92	100%			
			***************************************		/			
		Source Name	Approved (MU)	Actual Aug 2023 (MU)	Proportion of each Source in Actual Purchase (%)			
		RE Solar	0.52	0.50	9%			
		RE Non-Solar	0.57	1.91	35%			
	*	Peak sources (GMR STPP)	1.82	3.21	59%			
		Exchange/ Other Peak Source (PTC)/New Source	2.03	0.01	0%			
		DSM Pool	-	(0.07)	-1%			
		Sale of Surplus Power	-	(0.11)	-2%			
		Total	4.94	5.45	100%			
		Source Name	Approved (MU)	Actual Sep 2023 (MU)	Proportion of each Source in Actual Purchase (%)			
		RE Solar	0.52	0.68	13%			
		RE Non-Solar	0.57	1.28	25%			
		Peak sources (GMR STPP)	1.82	3.06	59%			
		Exchange/ Other Peak Source/New Source	2.03	0.08	2%			
		DSM Pool	-	0.13	3%			
		Sale of Surplus Power		(0.03)	-1%			
		Total	4.94	5.20	100%			



Sr. No.	Particular	Compliance			
7.000		Commission vide its Order dated 28 October 2022 in Case No. 177 of 2022. Subsequently, in the MTR Order dated March 31, 2023, in Case No. 216 of 2022, the Commission has approved the power procurement through this source until 31 October 2023. The share of MBBPL in this contract is 5 MW. 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 July 2023, August 2023, and September 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 July 2023, August 2023, and September 2023 is **Rs. 2.87 Crores**, **Rs. 2.91 Crores** and **Rs. 3.04 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. Further, the cost is also higher on account of the actual cost of power purchase (per unit) being higher than the approved cost of power purchase for sources like peak power, exchange / new source and RE sources.
- 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 3.06 MUs, 3.21 MUs and 3.06 MUs of conventional power from GMRETL in the months of July 2023, August 2023, and September 2023, respectively. Average rates of power purchase are Rs. 6.01/kWh in July 2023, Rs. 6.22/kWh in August 2023, and Rs. 6.42/kWh in September 2023 from this source.
- 5.4. Power procurement through Exchange and Other Peak Resource: MBPPL has procured power from Power Exchange at average rates of Rs. 6.56/kWh, Rs. 9.26/kWh and Rs. 8.10/kWh during the months of July 2023, August 2023, and September 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 0.08 MUs, 0.01 MUs, and 0.08 MUs in July 2023, August 2023, and September 2023, respectively. The trends observed in the power exchange in the respective months as shown in the below figure.

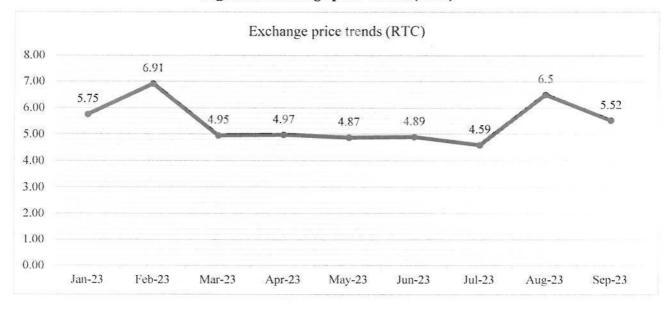


Figure 1: Exchange price trends (RTC)

- 5.5. Renewable Sources: The Commission has approved Rs. 0.53 Crores each for July 2023, August 2023, and September 2023 for the purchase of RE power to meet the Renewable Purchase Obligation (RPO). MBPPL has purchased RE Solar and RE Non-Solar during the months of July 2023, August 2023, and September. The RE Solar purchase quantum was 1.55 MUs, 0.50 MUs and 0.68 MUs at a power purchase rate of Rs. 4.19/kWh, Rs. 6.67/kWh and Rs. 7.04/kWh in the months of July 2023, August 2023, and September 2023, respectively. Similarly, the RE Non-Solar purchase quantum was 0.69 MUs, 1.91 MUs, and 1.28 MUs at an average power purchase rate of Rs. 7.21/kWh, Rs. 3.37/kWh, and Rs. 4.23/kWh in the months of July 2023, August 2023, and September 2023, respectively.
- 5.6. MBPPL has sourced the RE Solar and RE Non-Solar power from the exchange (GDAM and GTAM) and Manikaran Power Limited 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 July 2023, August 2023, and September 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 0.46 MUs and 0.07 MUs during July 2023 and August 2023 into the DSM pool. However, MBPPL has drawn 0.13 MU during September 2023 from the DSM pool. The Commission has also considered the average price of the power in the DSM pool (Rs. 3.70/kWh, Rs. 1.46/kWh and Rs. 3.46/kWh) as submitted by the Licensee for FAC computation along with the supporting documentation for the months July 2023, August 2023, and September 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. Sale of Surplus Power: The Commission has noted that MBPPL has sold the surplus power of 0.11 MUs and 0.03 MUs at average rate of Rs. 8.37/kWh and Rs. 7.21/kWh during the period August 2023 and September 2023, respectively.
- 5.11. Approved Cost: The Commission has noted that MBPPL procured 3.06 MUs, 3.21 MUs, and 3.06 MUs in July 2023, August 2023, and September 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 July 2023 to September 2023 is higher due to purchase of higher cost power, both conventional and RE sources (contracted as well as power exchange).
- 5.13. The details of the overall cost approved as per MTR Order and the actual cost for the months of July 2023, August 2023, and September 2023 is as shown in the Table 2Error! Reference source not found, below:

Table 2: Approved and Actual Power Purchase Cost for MBPPL

Source			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)
	Approved		1.82	=	1=0	1.16	6.35	1.16	6.35
Peak sources	Actual (July	2023)	3.06	=	-	1.84	6.01	1.84	6.01
(GMR STPP)	Actual (Augu	ıst 2023)	3.21	_	828	2.00	6.22	2.00	6.22
	Actual (Septe	ember 2023)	3.06	-	-	1.96	6.42	1.96	6.42
Exchange/Ot	Approved	T THE WAY	2.03			1.10	5.40	1.10	5.40
her Peak	Actual (July 2	2023)	0.08	-	-	0.05	6.56	0.05	6.56
Source/New	Actual (Augu	ıst 2023)	0.01	8	-	0.01	9.26	0.01	9.26
Source	Actual (Septe	ember 2023)	0.08	-	-	0.07	8.10	0.07	8.10
	Approved	RE Solar	0.52		-	0.25	4.90	0.25	4.90
		RE Non Solar	0.57	-	-	0.28	4.90	0.28	4.90
	Actual (July 2023)	RE Solar	1.55	-	-	0.65	4.19	0.65	4.19
Solar & Non- Solar		RE Non Solar	0.69	-	-	0.50	7.21	0.50	7.21
RE/REC	Actual	RE Solar	0.50	-	-	0.34	6.67	0.34	6.67
	(August 2023)	RE Non Solar	1.91	-	-	0.64	3.37	0.64	3.37
	Actual	RE Solar	0.68	<u> </u>	120	0.48	7.04	0.48	7.04
	(September 2023)	RE Non Solar	1.28	-	-	0.54	4.23	0.54	4.23
	Approved		- 1						-
DSM / Pool	Actual (July 2	2023)	(0.46)	-	-	(0.17)	3.70	(0.17)	3.70
D2141 / 1 001	Actual (Augu	ast 2023)	(0.07)	The state of the s	-	0.01	(1.46)	0.01	(1.46)

Source		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 (September 2023)	0.13		-	0.05	3.46	0.05	3.46
Sale of	Approved	- 1	-	-	- III		-	-
	Actual (July 2023)	-	-	-10	-	-	-	-
	Actual (August 2023)	(0.11)	-	-	(0.09)	8.37	(0.09)	8.37
	Actual (September 2023)	(0.03)	7 — 2	-	(0.02)	7.21	(0.02)	7.21
Sale of Surplus power	Approved			-		=		-
	Actual (July 2023)	2	0.00	2	# # ##	727	0.00	_
SLDC ree	Actual (August 2023)	-	0.00	-	-	Variable Cost (Rs./ kWh) Crore 3.46 0.05	0.00	-
	Actual (September 2023) 0.13 0.05 3.46 Approved	0.00	-					
Surplus power	Approved	4.94	- 1		2.79	5.64	2.79	5.64
	Actual (July 2023)	4.92	0.00	0.00	2.87	5.84	2.87	5.84
Total	Actual (August 2023)	5.45	0.00	0.00	2.90	5.33	2.91	5.33
	Actual (September 2023) #	5.20	0.00	0.00	3.04	5.84	3.04	5.84

^{*}KRC has to pay fixed short term open access charges irrespective of quantum of power purchase and hence per unit rate is higher.

In August 2023, due to the non-receipt of invoices against the purchase of wind power from Manikaran Power Limited, MBPPL has considered a quantum of 1.73 MUs and a corresponding amount of Rs. 44.76 Lakh against the same on a provisional basis. MBPPL received the invoices against this transaction in the month of September 2023 and hence this has been considered as a differential amount of Rs. (3.12) Lakh (difference of provisional amount of Rs. 44.76 Lakh and actual amount as per the invoice i.e., Rs. 41.64 Lakh) in the power purchase calculation for the month of September 2023.

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:





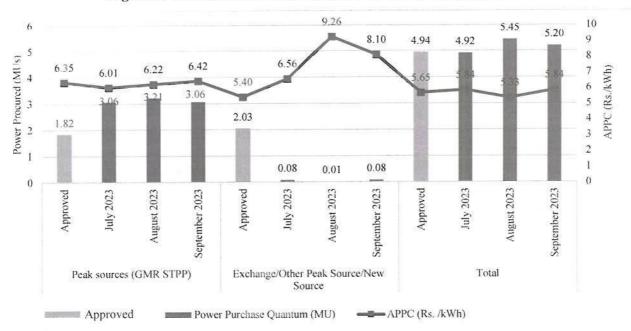


Figure 2: Variation in Power Procurement Quantum and APPC

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
		July 2023		6.01	MBPPL procured power from GMRETL based on the PPA which was duly approved
1	Peak sources (GMR STPP)	August 2023	6.35	6.22	by the Commission vide its Order dated 28 October 2022 in Case No. 177 of 2022 and
	(GMR SIII)	September 2023	ber 6.4	6.42	considered as part of the power sources in MTR Order in Case No. 216 of 2022.
		x 1 0000		4.19 (S)	Market discovered rate: RE power was
		July 2023		7.21 (NS)	purchased during the period from July 2023
			1 1	6.67 (S)	to September 2023 from Power Exchange
		August 2023		3.37 (NS)	(GDAM, GTAM, and LDC). Wind power
				7.04 (S)	procured from Manikaran Power Limited at
2	Solar (S) & non-Solar (NS) RE/REC	September 2023	4.90 (Solar) 4.90 (non- Solar)	4.23 (NS)	average rate of Rs 2.25/kWh for Group I projects and Rs 2.52/kWh for Group II to IV projects. Due to the non-receipt of invoices, the quantum and cost of wind energy procurement in August 2023 were considered on a provisional basis. Now, these invoices were received in September 2023, the differential cost (difference of actual cost and provisional cost in August 2023) is considered in September 2023. However, the

Sr. No.	Source	Month	Approved Rate (Rs. /kWh)	Actual Rate (Rs. /kWh)	Reason for rate variation
					differential quantum is not considered in this adjustment.
		July 2023		6.56	In addition to the contracted power, the peak power requirement was met through procurement of power from the various
3	Exchange/ Other Peak Source/New Source	August 2023	5.40	9.26	products of Power Exchange. The rates are higher than the approved rates, however, they are competitively discovered in the power exchange. Further the quantum is also
		September 2023	mber	8.10	miniscule at levels of 0.08 MUs, 0.01 MUs and 0.08 MUs in July 2023, August 2023, and September 2023.
	DCM /	July 2023		3.70	
4	DSM / Imbalance	August 2023		(1.46)	DSM rates are based on supporting
4	Pool	September 2023	-	3.46	documents provided by MBPPL.
		July 2023		5.84	
.6	Total	August 2023	5.64	5.33	Due to the above factors.
		September 2023		5.84	

5.16. Considering the above, the Commission allows the average power purchase cost of Rs. 5.84/kWh, Rs. 5.33/kWh, and Rs. 5.84/kWh for the months of July 2023, August 2023, and September 2023, respectively as shown in Table 3 above. The variation in power purchase cost is on the higher side in July 2023, August 2023, and September 2023 due to the higher cost of RE from exchange 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 July 2023, August 2023, and September 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 a differential per unit rate at which Z_{FAC} is to be passed on to the consumers.
- 6.2. Thus, the following Table 4 shows the Z_{FAC} worked out by the Commission on account of difference in power purchase cost for the month of July 2023, August 2023, and September 2023, respectively.

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

Sr. No.	Particulars	Units	Jul-23	Aug-23	Sep-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	5.84	5.33	5.84
3	Change in average power purchase cost (=2 -1)	Rs. /kWh	0.20	(0.31)	0.20
4	Net Power Purchase	MU	4.92	5.45	5.20
5	Change in power purchase cost (=3 x 4/10)	Rs. Crore	0.10	(0.17)	0.11



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	Jul- 23	Aug- 23	Sep- 23
1.1	Incremental cost allowed to be recovered in Month n-4	Rs. Crore	0.62	0.60	0.54
1.2	Incremental cost in Month n-4 actually recovered in month n-2	Rs. Crore	0.64	0.58	0.60
1.3	(over-recovery)/under-recovery (=1.2 - 1.1)	Rs. Crore	(0.02)	0.02	(0.06)
2	Carried forward adjustment for over-recovery/under-recovery attributable to application of ceiling limit for previous month	Rs. Crore	0.90	0.44	0.02
3	Adjustment factor for over-recovery/under-recovery (1.3+2.0)	Rs. Crore	0.88	0.46	(0.05)

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 be **Rs. 0.01 Crores** for the month of July 2023 and **Rs. 0.00** Crores for August 2023 and **Rs. (0.00) Crores** for September 2023.
- 8.2. Holding cost for the month of July 2023 to September 2023 is calculated by considering one-year MCLR + 150 basis points which turns out to be 10.02%, 10.05%, and 10.05% for July 2023, August 2023, and September 2023 respectively.
- 8.3. The Commission has computed the holding cost towards the amount under recovered in the month of July 2023 to September 2023 which is as shown in Table below:

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

Particulars	Units	Jul-23	Aug-23	Sep-23
Adjustment factor for over-recovery/under-recovery	Rs. Crore	0.88	0.46	(0.05)
Interest rate	%	10.02%	10.05%	10.05%
Carrying cost for over-recovery/under-recovery	Rs. Crore	0.01	0.00	(0.00)

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. 0.980 Crores, Rs. 0.296 Crores and Rs. 0.059 Crores for the months of July 2023, August 2023, and September 2023, respectively. There was no FAC fund available at the beginning of July 2023. Further, the Commission has determined positive FAC for the month of July 2023, August 2023, and September 2023, accordingly, the FAC fund of nil amount has been approved at end of month from April 2023 to September 2023.

9.3. The Commission has considered the one-year MCLR rate declared by the SBI from time to time plus 150 basis points which works out to 10.02%, 10.05%, and 10.05% for July 2023, August 2023, and September 2023, respectively. Considering that the FAC fund approved by the Commission is nil, the Commission has calculated nil holding cost for the months July 2023, August 2023, and September 2023, to be contributed to the FAC Pool.

10. Disallowance due to excess Distribution Loss

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:

Monthly Sr. No. **Particulars** Units Approved in Jul-23 Aug-23 Sep-23 **Tariff Order** Net Energy input at Distribution Voltages MU 4.78 4.761 4.983 4.690 2 Energy sales at Distribution voltages MU 4.73 4.713 4.930 4.641 3 Distribution Loss (1 - 2) MU 0.56 0.048 0.053 0.049 4 Distribution Loss as % (3/1) % 0.97% 1.00% 1.06% 1.04% 5 Annual Sliding Distribution Loss % 1.10% 1.15% 1.18% Excess Distribution Loss = [Annual Sliding 0.006 0.009 0.010 6 Distribution Loss - Distribution loss MU approved] x Net Energy Input (1) Disallowance of FAC due to excess Rs. 0.001 0.001 0.0007

Table 7: Disallowance of FAC due to excess distribution loss

10.3. As seen from the above Table, the annual sliding distribution loss for the months of July 2023 to September 2023 is 1.10%, 1.15%, and 1.18%, respectively, which is higher than the monthly distribution loss of 0.97% approved in the MTR Order. The monthly distribution loss for the months of July 2023 to September 2023 is also higher than the MTR approved distribution loss of 0.97%.

Crore



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 July 2023, August 2023, and September 2023. Though the standalone FAC for all these months is positive, MBPPL has considered Rs. 0.001 Crore, Rs. 0.001 Crore and Rs. 0.000 Crore of disallowance of FAC due to excess Distribution loss for months of July 2023, August 2023, and September 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 ZFAC

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

Table (6:	Summary	of All	lowable	\mathbb{Z}_{FAC}
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Sr. No.	Particulars	Units	Jul-23	Aug-23	Sep-23
1	Calculation of Z _{FAC}				
1.1	Change in cost of generation and power purchase attributable to Sales within the License Area (F)	Rs. Crore	0.097	(0.167)	0.105
1.2	Carrying cost for over-recovery/under-recovery (C)	Rs. Crore	0.007	0.004	(0.000)
1.3	Adjustment factor for over-recovery/under-recovery (B)	Rs. Crore	0.876	0.459	(0.046)
1.5	$Z_{FAC} = F + C + B$	Rs. Crore	0.980	0.296	0.059
2	Calculation of FAC Charge				
2.1	Energy Sales within the License Area	MU	4.713	4.930	4.641
2.2	Excess Distribution Loss	MU	0.006	0.009	0.010
2.3	Z _{FAC} per kWh	Rs. /kWh	2.078	0.600	0.127
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	0.600	0.127
3	Recovery of FAC				
3.1	FAC disallowed corresponding to excess Distribution Loss [((2.1+2.2) x 2.3)/10]	Rs. Crore	0.001	0.001	0.000
3.2	Allowable FAC	Rs. Crore	0.979	0.296	0.059
4	Utilization of FAC Fund		0.979	0.296	0.059
4.1	Opening Balance of FAC Fund	Rs. Crore	-	-	2
4.2	Holding Cost on FAC Fund	Rs. Crore	-	-	-
4.3	Z _{FAC} for the month (Sr. No. 3.2)	Rs. Crore	0.979	0.296	0.059
4.4	Closing Balance of FAC Fund	Rs. Crore	-	23 4 5	-
4.5	Z _{FAC} leviable/refundable to consumer	Rs. Crore	0.979	0.296	0.059
5	Total FAC based on category wise and slab wise allowed to be recovered	Rs. Crore	0.539	0.278	0.055
6	Carried forward FAC for recovery during future period (3.1-3.2-4)	Rs. Crore	0.440	0.018	0.004

11.2. It can be seen from the above Table 6 that the standalone FAC for the month of July 2023, August 2023 and September 2023 is Rs. 0.979 Crores, Rs. 0.296 Crores, and Rs. 0.059 Crores respectively. Based on energy sales and excess distribution loss, FAC per unit has been worked out as Rs. 2.078/kWh, Rs.

0.600/kWh and Rs. 0.127/kWh for the months of July 2023, August 2023, and September 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 July 2023, August 2023, and September 2023 is positive and hence same is adjusted in the FAC fund being maintained by MBPPL. As the FAC per unit computed in the month of July 2023 as shown in Table 6 above is 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 in July 2023. Consequently, due to ceiling limit (Rs. 1.303/kWh), the FAC recoverable has been worked out as Rs. 0.979 Crores, Rs. 0.296 Crores, and Rs. 0.059 Crores for the month of July 2023, August 2023, and September 2023, respectively.
- 11.6. Thus, considering the ceiling limit of 20% of variable component of tariff and the matter discussed in the preceding paragraph, FAC equivalent Rs. 0.440 Crores (i.e., Rs. 0.979 Crores minus Rs. 0.539 Crores) for the month of July 2023, Rs. 0.018 Crores (i.e., Rs. 0.296 Crores minus Rs. 0.278 Crores) for the month of August 2023, and Rs. 0.004 Crores (i.e., Rs. 0.059 Crores minus Rs. 0.055 Crores) for the month of September 2023 has remained unrecovered which will be recovered as part of FAC of upcoming months.
- 11.7. There was nil FAC fund available at the beginning of July 2023 and no FAC fund was created during the period from July 2023 to September 2023, accordingly, the Commission has also approved nil holding cost on the FAC Fund during the months of July 2023 to September 2023. The Commission has determined a positive FAC of Rs. 0.979 Crores, Rs. 0.296 Crores and Rs. 0.059 Crores for the months of July 2023, August 2023, and September 2023, respectively. Accordingly, the positive FAC determined by the Commission for July 2023, August 2023, and September 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:



Approval of FAC Charges for the months of July 2023, August 2023, and September 2023

 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_{FAC} for the month July 2023, August 2023, and September 2023 to be levied on consumers of MBPPL in the billing month of September 2023, October 2023, and November 2023.

Table 7: Category wise FAC Revenue for billing month September 2023, October 2023, and November 2023 (Rs. Crore)

Sr. No	Consumer Category	Slabs	Z _{FAC} computed for July 2023	Z _{FAC} computed for August 2023	Z _{FAC} computed for September 2023
	HT Category				
1	HT- I Industrial	all units	0.460	0.241	0.048
2	HT-II Commercial	all units	=		50
	LT Category				
3	LT-II(A) Commercial (0-20 kW)	all units	0.001	0.001	0.000
4	LT-II (B) Commercial (above 20 kW)	all units	0.002	0.002	0.000
5	LT-III (A) Industrial (0- 20 kW)	all units	0.00 STREGULATO	0.002	0.000

Approval of FAC Charges for the months of July 2023, August 2023, and September 2023

Sr. No	Consumer Category	Slabs	Z _{FAC} computed for July 2023	Z _{FAC} computed for August 2023	Z _{FAC} computed for September 2023
6	LT-III (B) Industrial (above 20 kW)	all units	0.070	0.032	0.006
7	LT-IV – Electric Vehicle (EV) Charging Stations	all units	=10	-	-
	Total FAC Recovery (Rs. Crore)		0.539	0.278	0.055



