

# महाराष्ट्र विद्युत नियामक आयोग

# **Maharashtra Electricity Regulatory Commission**

Ref. No. MERC/FAC/2023-24/ 0 57-5

To,

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 January 2023, February 2023, and March 2023.

Reference:

1. MBPPL's FAC submission for the months of January 2023, February 2023, and

March 2023 vide email dated 30 May, 2023.

2. Data gaps raised vide email dated 24 July, 2023

3. MBPPL's response to queries raised vide email dated 1 August 2023

Sir.

Upon vetting the FAC calculations for the months of January 2023, February 2023, and March 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	January 2023	February 2023	March 2023
ZFAC allowed for recovery (Rs. Crore)	0.371	0.364	0.424

The Commission allows the carry forward FAC of Rs. 10.24 Crore, Rs. 11.27 Crore, and Rs. 12.51 Crore in the months of January 2023, February 2023, and March 2023, respectively. As the FAC recovery for the previous months has already been allowed till March 2023. Vide MTR Order dated 31 March 2023, revised Tariff has been made effective from 1 April 2023 onwards. The Commission has not approved any FAC Fund amount to be carried forward to next FAC billing cycle with holding cost. Further, as directed by the Commission, MBPPL shall maintain the monthly account of FAC Fund, if applicable and upload it on its website to maintain transparency of FAC Fund and also for information of all the stakeholders.

Yours faithfully,

Date: 02 November, 2023

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

Encl: Annexure A: Detailed Vetting Report for the period of January to March, 2023.

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**ANNEXURE** 

Detailed Vetting Report
Date: 02 November, 2023

# POST FACTO APPROVAL FOR FAC CHARGES FOR THE MONTHS OF JANUARY 2023, FEBRUARY 2023, AND MARCH 2023

Subject:

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

the months of January 2023, February 2023, and March 2023

Reference:

1. MBPPL's FAC submission for the months of January 2023, February 2023, and

March 2023 vide email dated 30 May, 2023.

2. Data gaps raised vide email dated 24 July, 2023

3. MBPPL's response to queries raised vide email dated 1 August 2023

# 1. FAC submission by MBPPL Undertaking:

1.1. MBPPL has made FAC submissions for the months of January 2023, February 2023, and March 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 March 2023, April 2023, and May 2023.

# 2. Background

- 2.1. On 30 March, 2020 the Commission has issued Tariff Order in respect of MBPPL (Case No. 328 of 2019) for approval of Aggregate Revenue Requirement and Multi Year Tariff for the Control Period from FY 2020-21 to FY 2024-25. Revised Tariff has been made applicable from 1 April, 2020.
- 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.
- 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.

- 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 May, 2023 MBPPL has filed FAC submissions for the months of January 2023, February 2023, and March 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 MYT Order passed by the Commission in Case No. 328 of 2019, the Commission has approved revised Tariffs 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	MUs	
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	Approved by the	Monthly	Acti	ual Sales (I	MU)	
Consumer Category	Commission (MU)	Approved (MU)	Jan-23	Feb-23	Mar-23	
	(I)	(II=I/12)	(III)	(IV)	(V)	
HT Category				(-1)	( ' )	
HT- I Industrial	74.04	6.17	3.49	3.43	4.00	
HT-II Commercial			3.15	5.15	4.00	
LT Category	HAT TRANSPORT		THE THE	2700		
LT-II (A) Commercial (0-20 kW)	0.78	0.07	0.01	0.01	0.01	
LT-II (B) Commercial (above 20 kW)	0.37	0.03	0.03	0.03	0.04	
LT-III (A) Industrial (0-20 kW)	0.01	0.00	0.04	0.04	0.04	
LT-III (B) Industrial (above 20 kW)	7.86	0.66	0.50	0.49	0.57	
Total	83.06	6.92	4.07	4.00	4.66	

3.3. It can be observed from the above Table 1 that the actual sales during the months of January 2023, February 2023, and March 2023 are 4.07 MU, 4.00 MU and 4.66 MU respectively, which are 41.17%, 42.26%, and 32.68% less than the monthly approved energy sales of 6.92 MU by the Commission for the FY 2022-23. The major variation was which is primarily observed in all categories except LT II B – Commercial (above 20 kW) and LT III A – Industry (0 - 20 kW). However, the major variation was observed in the HT-I Industrial, LT-II (A) Commercial (below 20 kW) and LT-III (B) Industrial categories, which is impact of work for home in IT industry of MBPPL SEZ area.

# 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. MBPPL had a short term PPA with GMR Energy Trading Limited which was valid till May 2020, and which was subsequently extended till March 2021 with approval of the Commission.
- 4.2.2. Post that the Commission in its Order dated 30 June, 2021 in Case No. 69 of 2021 has approved the combined power procurement of for MBPPL, GEPL and KRCIPPL for FY 2021-22 on short-term basis. Accordingly, the Commission has provided the approval of



Power Purchase Agreement and Adoption of Tariff determined through transparent bidding process for a Short-Term procurement of power up to 14 MW (RTC) for KRC discoms for one year starting from 1 July, 2021 to 30 June, 2022 through combined power procurement. In the said order, the quantum estimated for MBPPL is up to 6.5 MW (Up to 5 MW RTC and up to 1.5 MW between 0800 and 2300 hours). The relevant extract is as given below:

"Accordingly, the Commission approves PPA dated 27 May 2021 entered between KRC DISCOMs (Mindspace Business Parks Private Limited; Gigaplex Estate Private Limited; KRC Infrastructure and Projects Private Limited) and Kreate Energy (I) Pvt. Ltd. - Power Department of Sikkim."

However, MBPPL has not purchased power from Kreate Energy (I) Pvt., as the PPA with Kreate Energy was valid till 30th June 2022.

- 4.2.3. Subsequently, KRC DISCOMs had filed a Petition before the Commission seeking approval for undertaking combined power purchase at Power Exchange linked rates for the period from July 2022, till alternative arrangements are in place. The Commission in its Order dated 15 September 2022 in Case No. 138 of 2022, has allowed KRC DISCOMs to procure the power under exchange linked contracts till March 2023.
- 4.2.4. In this regard the Commission in its analysis and rulings in the Order in Case No. 138 of 2022 had noted the following:
  - "11. Thus, failure of M/s Kreate Energy (I) Pvt. Ltd to supply power as per contract during the period of April to June 2022 and non-successful bidding process has resulted into KRC DISCOMs to depend on Power Exchanges for meeting its consumer demand. Further due to high demand, bids for all time blocks were not getting cleared on power exchanges and hence during that period, KRC DISCOMs had to depend on DG Set for maintaining continuity of power supply to its consumers. To avoid such situations, KRC DISCOMs entered into exchange linked bilateral contract with M/s GMR Energy Trading Ltd and has requested the Commission to allow such contract till it successfully selects supplier through bidding process.
  - 12. The Commission notes that exchange linked bilateral contract is undertaken outside the power market platform. Such contract does not strictly fall under Section 62 (tariff determined by the Commission as per Tariff Regulations) or Section 63 (tariff discovered through competitive bidding process) of the Electricity Act, 2003. The Commission has been considering such contracts for pass through in power purchase expenses as such contracts form very small quantum of total power purchase basket of Distribution Licensee and tariff is linked to the rates that are transparently discovered in power exchange, beside most of the time some discount

is also offered by seller in such contracts. But in the present case, KRC DISCOMs have proposed to meet all its power purchase quantum through such exchange linked contracts. In the normal course, such arrangement is not advisable, and this would not have been allowed. But considering the efforts taken by KRC DISCOMs for procurement of power through competitive bidding, and the fact that during high demand period, bid quantum was not getting cleared on power exchange platform forcing them to supply power from DG set is neither economical nor it is viable for longer periods, the Commission deems it fit to allow such exchange linked contracts till KRC DISCOMs successfully discovers tariff in due bidding process. The Commission also notes that KRC DISCOMs are procuring green power from GDAM/GTAM market segment on power exchanges. Such green power procurement is meeting part of its load requirement. Also, such exchange linked contracts and green power procurement from exchange is also helping KRC DISCOMs to maintain Grid Discipline by not overdrawing power from the Grid.

13. The Commission also notes that such exchange linked contracts entered by KRC DISCOM have charged premium (50 paise/unit) over the exchange price for certain period (7 days). KRC DISCOM have justified it as during that period its contracted supplier refused to supply the power and its bids on power exchanges were not getting cleared for all the time blocks, hence to maintain continuity in power supply, KRC DISCOM had to agree to such premium. In this regard, the Commission notes that KRC DISCOM has separately filed Petition in Case No. 162 of 2022 seeking compensation towards increased power purchase expenses on account of non-supply of power by its supplier, the Commission will decide on the issue of allowing such premium as passthrough during that proceeding.

14. Having allowed exchange linked contracts as above, the Commission notes that price being discovered on power exchange during recent past is much higher than average power procurement rate (Rs. 3.92 per unit) approved in MYT Orders of KRC DISCOMs. This will ultimately impact the consumer tariff through FAC mechanism or truing up process (if full expenses cannot be allowed due to FAC ceiling) in upcoming Mid Term Review process which will ultimately reduce the electricity tariff advantage vis-à-vis tariff applicable to parallel licensee in that area. Therefore, to remain competitive and protect interest of their consumers, KRC DISCOMS shall take extra efforts for finding cheaper and reliable source of power supply. Hence, the Commission allows such sole power procurement from exchange linked contracts only for FY 2022-23. KRC DISCOMs shall ensure that firm source of supply is contracted before March 2023."



- 4.2.5. In reply to the Commissions query, the KRC Discoms have replied that they have floated tenders for power procurement four time from April 2022 to June 2022, however they did not receive bid/participation from the market participants. Despite their best efforts, KRC discoms were left without any power procurement agreement.
- 4.2.6. MBPPL initiated short-term competitive bidding process 5th time on 9 August, 2022 and decided to combinedly procure 8 MW RTC Power and 4 MW Peak Power (08:00 23:00 Hrs for Weekdays, i.e., Monday to Friday and excluding Saturday and Sunday) for a period of one year from 1 November, 2022 to 31 October, 2023 for KRC Discoms (Mindspace Business Parks Private Limited; Gigaplex Estate Private Limited; KRC Infrastructure and Projects Private Limited).
- 4.2.7. The Commission has approved the PPAs signed with GMRETL and PTC at Average Rate of Rs. 6.35/kWh for RTC and Rs. 7.95/kWh for Peak Power respectively in its order dated 28 October, 2022 in Case No. 177 of 2022. The quantum estimated for MBPPL is up to 7 MW i.e., up to 5 MW RTC for the period 1 November, 2022 to 31 October, 2023 and up to 2 MW Peak Power for the period 1 November, 2022 to 28 February, 2023. The generator identified by GMRETL is Birla Carbon for RTC supply and peak power is being supplied by PTC through M/s NSL Sugars Ltd., which is a bagasse-based plant which offers Renewable Energy Power, which will be sufficient to meet the RPO requirement as well as green tariff requirement of KRC DISCOMs.
- 4.2.8. As the peak power contract expired in February 2023. In order to fulfill the peak power requirement of KRC Discoms from a firm contracted source, MBPPL initiated a short-term competitive bidding process on November 17, 2022, and decided to collectively procure 4 MW of peak power (from 08:00 to 23:00 Hrs) for a period of eight months, from March 1, 2023, to October 31, 2023, for KRC DISCOMs (Mindspace Business Parks Private Limited, Gigaplex Estate Private Limited, KRC Infrastructure and Projects Private Limited). However, bids were received only for the months of March 23, August 23, September 23, and October 23. The finalized rate for these months, determined through bidding and negotiation, was Rs. 7.90/kWh. However, the PPA was signed with successful bidder (PTC India) for the month of March, 2023 only, expecting the better price discovery for the Peak power for the period of Aug 2023 to Oct 2023. An intimation letter in this regard was submitted to the Commission by KRC DISCOMs vide its letter dated 10 January, 2023.
- 4.3. Accordingly, MBPPL has purchased power from GMR Energy Trading Limited (GMRETL) on bilateral basis at the rates of Rs. 6.12/kWh in the month of January 2023, Rs. 6.27/kWh in the month of February 2023 and Rs. 6.52/kWh in the month of March 2023. Also, peak load purchases are done from PTC at the rate (including scheduling charges) of Rs. 8.03/kWh



in the month of January 2023, Rs. 8.03/kWh in the month of February 2023 and Rs. 7.98/kWh in the month of March 2023.

- 4.4. Further, MBPPL has also procured RE power through IEX in the GDAM and GTAM during the months of of January 2023, February 2023, and March 2023. MBBPL purchased 0.02 MU and 1.23 MU of Solar and Non-Solar Power (incl. PTC peak) in January 2023 at an average rate of Rs. 7.33/kWh and Rs. 7.80/kWh, respectively. Similarly, MBBPL purchased Nil MUs and 1.78 MU of Solar and Non-Solar Power (incl. PTC peak) in February 2023 at an average rate of Rs. 7.72/kWh and 0.05 MUs and 2.38 MU of Solar and Non-Solar Power (incl. PTC peak) in March 2023 at an average rate of Rs. 6.95/kWh and Rs. 7.03/kWh, respectively.
- 4.5. The Commission notes that MBPPL has purchased of RE power (solar and non-solar) through the power exchanges and non-solar power from PTC to meet the RPO obligations in the months of January 2023, February 2023, and March 2023. The power purchase through the power exchange has prices market driven and competitively discovered. While the Commission had allowed the KRC DISCOMs to procure RECs to meet the RPO obligations in the MYT order, the Commission in its Order in Case no. 231 of 2020 dated 23 January 2021 has also permitted the KRC DISCOMs to procure RE power before FY 2022-23, so that the benefit of RE purchase can be passed on to the consumers.
- 4.6. MBPPL has also procured 0.01 MU of conventional power in the months of January 2023 and March 2023 each, from Power Exchange at average rates of Rs. 13.99/kWh and 8.32/kWh, respectively. MBPPL has submitted that the Commission in its order dated 15 September, 2022 in Case No. 138 of 2022 has allowed KRC DISCOMs to procure the power under exchange linked contracts till it successfully discovers tariff in due bidding process.
- 4.7. Summary of power purchase of MBPPL is as under:

Table 2: Summary of Power Purchase in the months of January 2023, February 2023, and March 2023

Sr. No.	Particular	Compliance
1	Purchase from approved sources	No. MBPPL has procured power under exchange linked contracts as per order dated 15 September, 2022 in Case No. 138 of 2022.  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 and 4 MW peak for period from 1 November, 2022 to 28 February, 2023 (which was extended for the month of March 2023).



Sr. No.	Particular		Compli	ance						
ris-	er Coor yearned no co etassig 1988M refind	Property of the Control of the Contr	In line with the aforesaid order MBPPL has procured power from GMRETL, PTC and through various product of power exchange.							
2	Merit Order Dispatch	MBPPL procure power to cater Base and Peak I MBPPL schedule RTC r least cost as compared requirement met NSL S	load for RTC an equirement from 1 to PTC (NSI	d Peak hour, re GMRETL (Bi Sugars Ltd.)	espectively. However rla Carbon) which has . Further, peak load					
3	Fuel Utilization Plan	Not applicable. All the of EA, 2003.	Not applicable. All the sources of power procurement fall under Section 63							
4	DSM Pool	MBPPL injected 0.09 N 2023, February 2023, ar								
5	Sale of Surplus Power	There was no sale of su 2023.	rplus power in the	he months of Ja	anuary 2023 to March					
6	Power Purchase	Actual Power Purchase January 2023, Februar approved monthly power compared to approved s	y 2023, and Mer purchase of 7.	arch 2023, res	spectively, as agains					
7	Source wise Power Purchase	Source Name	Approved (MU)	Actual Jan 2023 (MU)	Proportion of each Source in Actual Purchase (%)					
		RE Solar	0.58	0.02	0%					
	nati bas 2000 punning	RE Non-Solar (incl. PTC peak)	0.83	1.23	29%					
		Base Load – Medium Term Sources / Bilateral	5.69	3.12	73%					
		Exchange/ Other Peak Sources	0.12	0.01	0%					
	N	DSM Pool		(0.09)	-2%					
	of 2022 the Commission	Total	7.22	4.29	100%					
	W peak & r parce ; W peak & r parce ; commentar the nu	Source Name	Approved (MU)	Actual Feb 2023 (MU)	Proportion of each Source in Actual Purchase (%)					
		RE Solar	0.58	-	0%					
		RE Non-Solar (incl. PTC peak)	0.83	1.78	42%					



Sr.			Compl	iance	
		Base Load – Medium Term Sources / Bilateral	5.69	2.83	68%
		Exchange/ Other Peak Sources	0.12	ne ed moes	0%
	influence and room from	DSM Pool Total	7.22	(0.42) 4.19	-10% 100%
	and 1772 established	Source Name	Approved (MU)	Actual Mar 2023 (MU)	Proportion in Actual Purchase (%)
		RE Solar	0.58	0.05	1%
	this death and the	RE Non-Solar (incl. PTC peak)	0.83	2.38	49%
	and before	Base Load – Medium Term Sources/ Bilateral	5.69	3.14	64%
		Exchange/ Other Peak Sources	0.12	0.01	0%
	and mennil face	DSM Pool		(0.70)	-14%
		Total	7.22	4.88	100%
		In Order dated 28 Octob has approved for combine 1 November, 2022 to 31 November, 2022 to 28 Fe as well).	per, 2022 in Cased power procur October, 2023	vers tariff in due se No. 177 of 20 rement of 8 MW 8 and 4 MW pea	e bidding process.  D22 the Commission RTC for period from 1
		# While the Commission to meet the RPO obligation of 2020 dated 23 January DISCOMs to procure RE purchase can be passed of	ons in the MY7, 2021, the Con power before F	order, in the Omission has also Y 2022-23, so t	rder in Case no. 231 o permitted the KRC
8	Power Purchase under Section 63 of Electricity Act, 2003	Monthly power purchase purchase quantum and ra that same has been con purchase quantum and ra	invoices are su te are verified asidered in the	bmitted by MBI from the invoic FAC calculati	es, and it is ensured



#### 5. Power Purchase Cost:

- 5.1. The Commission has scrutinised the detailed bills/invoices submitted for power purchase during the month of January 2023, February 2023, and March 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 MYT Order respectively.
- 5.2. The total Power Purchase Cost incurred in January 2023, February 2023, and March 2023 is Rs. 2.79 Crore, Rs. 2.91 Crore and Rs. 3.46 Crore, respectively which is higher than the monthly approved Power Purchase cost of Rs. 2.77 Crore by the Commission.
- 5.3. Medium Term Source: The Commission in its 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 and 4 MW peak for period from 1 November, 2022 to 28 February, 2023 (which was later extended for March 2023). MBPPL procured 3.12 MU, 2.83 MU and 3.14 MU from GMRETL in the months of January 2023, February 2023, and March 2023, respectively. Average rate of power purchase is Rs. 6.12/kWh in January 2023, Rs. 6.27/kWh in February 2023 and Rs. 6.52/kWh in March 2023.
- 5.4. Power procurement through Exchange and Other Peak Resource: MBPPL has procured 0.01 MU from IEX for the months of January 2023 and March 2023 from DAM / RTM / TAM products available on IEX platform, which contributed negligible of the total power purchase during the months of January 2023, average rate of power purchase was high at Rs. 13.99/kWh in January 2023 and 8.32/kWh in March 2023, because of non-availability of any medium-term contracted source. The higher cost of purchase from exchange reflects the trends observed in the power exchange in the month of February 2023.

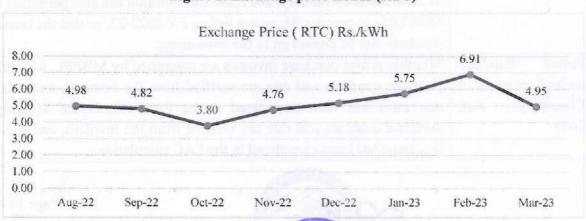


Figure 1: Exchange price trends (RTC)

- 5.5. Other charges: In January 2023, Liquidated Damages credit was received from Kreate in compliance with APTEL Order in appeal No. 428 of 2022 amounting to Rs. 6,33,625/- have been considered separately in January 2023. The Liquidated Damages pertains to the payment of compensation amount for unscheduled power from 12.10.2021 to 31.10.2021 by the Kreate Energy India Pvt. Ltd to MBPPL.
- 5.6. Renewable Sources: The Commission has approved Rs. 0.41 Crore each for January 2023, February 2023, and March 2023 for purchase of RE power to meet the Renewable Purchase Obligation. MBPPL has purchased RE Solar and RE Non-Solar (incl. PTC peak) during the months of January 2023, February 2023 and March 2023. The RE Solar purchase quantum was 0.02 MUs at a power purchase rate of Rs. 7.33/kWh in January 2023, Nil in February 2023 and 0.05 MUs at the rate of Rs. 6.95/kWh in March 2023. Similarly, the RE Non-Solar (incl. PTC peak) purchase quantum was 1.23 MU at a power purchase rate of Rs. 7.80/kWh in January 2023, 1.78 MU at the rate of Rs. 7.72/kWh in February 2023 and 2.38 MU at the rate of Rs. 7.03/kWh in March 2023, respectively. This non-Solar power includes procurement of 0.65 MU, 0.53 MU and 0.59 MU of bagasse based peak power from PTC in the month of January 2023, February 2023, and March 2023, respectively. The RE based peak load from PTC was procured at the rate of Rs. 8.03/kWh, Rs 8.03/kWh and Rs 7.99/kWh for January 2023, February 2023, and March 2023, respectively.
- 5.7. Accordingly, MBPPL has sourced the RE Solar and RE non-Solar power from the exchange (GDAM and GTAM) and non-Solar power through PTC to meet the RPO obligation.
- 5.8. 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 FAC mechanism.
- 5.9. DSM Pool: It is observed that MBPPL has injected 0.09 MU during January 2023, 0.42 MU during February 2023 and 0.70 MU in March 2023 into the DSM pool. The Commission has also considered the average price of the power in the DSM pool (Rs. 4.65/kWh, Rs. 5.52/kWh, and Rs. 4.34/kWh) as submitted by the Licensee for FAC computation along with the supporting documentation.
- 5.10. The Commission has noted that MBPPL has followed Merit Order Dispatch for scheduling of power and all sources are scheduled according to SLDC instructions.
- 5.11. No sale of surplus power was done during the period January 2023 to March 2023.



- 5.12. **Approved Cost**: The Commission has noted that MBPPL procured nil quantum of power from its approved sources due to non-availability of any medium-term contracted source. The Medium-Term Power Purchase Agreement of MBPPL with Kreate Energy (I) Pvt. Ltd. has expired on 30 June 2022.
- 5.13. The APPC during the period January 2023 to March 2023 is higher due to purchase of higher cost power, both conventional and RE, from power exchange to meet the higher demand in period January 2023 to March 2023.
- 5.14. The details of the overall cost approved as per MYT Order and the actual cost for the months of January 2023, February 2023 and March 2023 is as shown in the Table 3Error!

  Reference source not found. below:

Table 3: 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	5.69	- 1		2.31	4.06	2.31	4.06
Base Load - Medium	Actual (January 2023)	3.12	Tradient	director to	1.91	6.12	1.91	6.12
Term Sources - Bilateral	Actual (February 2023)	2.83	on description	o To para not MISP	1.77	6.27	1.77	6.27
lo no	Actual (March 2023)	3.14		amin' an	2.05	6.52	2.05	6.52
	Approved	-	-	-			int files	
Exchange/	Actual (January 2023)	0.01	dional ECO.		0.01	13.99	0.01	13.99
Other Peak Source	Actual (February 2023)	2 2854 140	-	-		<u>.</u>	= T-1	-
	Actual (March 2023)	0.01	M. Lawrells NG Se of yo	الوائل الدي الحط متدسرط	0.01	8.32	0.01	8.32
Solar &		0.58 (Solar)			0.17 (Solar)	2.90 (Solar)	0.17 (Solar)	2.90 (Solar)
Non-Solar (incl. PTC peak) RE/REC	Approved	0.83 (non- Solar)			0.24 (non- Solar)	2.87 (non- Solar)	0.24 (non- Solar)	2.87 (non- Solar)
	Actual (January 2023)	0.02 (RE Solar)	-	JRICH.	0.01 (RE Solar)	7.33 (RE Solar)	0.01 (RE Solar)	7.33 (RE Solar)

	ا بوبوران	1.23 (non- Solar)	43.61 Kin	ne Itelle	0.96 (non- Solar)	7.8 (non- Solar)	0.96 (non- Solar)	7.8 (non- Solar)
	Actual	V Joseph Design				dering?		
	(February 2023)	1.78 (non- Solar)	-	-	1.37 (non- Solar)	7.72 (non- Solar)	1.37 (non- Solar)	7.72 (non- Solar)
	Actual (March	0.05 (RE Solar)	-		0.04 (RE Solar)	6.95 (RE Solar)	0.04 (RE Solar)	6.95 (RE Solar)
	2023)	2.38 (non- Solar)		/1 <u>-</u>	1.68 (non- Solar)	7.03 (non- Solar)	1.68 (non- Solar)	7.03 (non- Solar)
	Approved					-	-	
	Actual (January 2023)	-0.09		=	-0.04	4.65	-0.04	4.65
DSM / Pool	Actual (February 2023)	-0.42	-	- 1	-0.23	5.52	-0.23	5.52
	Actual (March 2023)	-0.70		-	-0.30	4.34	-0.30	4.34
	Approved					-		-
	Actual (January 2023)	-	0.00	-	-	æ.	0.00	-
SLDC Fee	Actual (February 2023)	-	0.00	-		-	0.00	-
	Actual (March 2023)	-	0.00	13 <u>6</u> 1		-	0.00	-
	Approved	7.22	-		2.77	3.84	2.77	3.84
	Actual (January 2023)	4.29	0.00	DV 3 -	2.79	6.51	2.79	6.51
Total	Actual (February 2023)	4.19	0.00	ds = 1	2.91	6.96	2.92	6.96
	Actual (March 2023)	4.88	0.00	-	3.46	7.09	3.46	7.09

<sup>#</sup> Approved cost for Short-Term PPA Peak Load as per the MYT Order in Case No. 328 of 2019

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



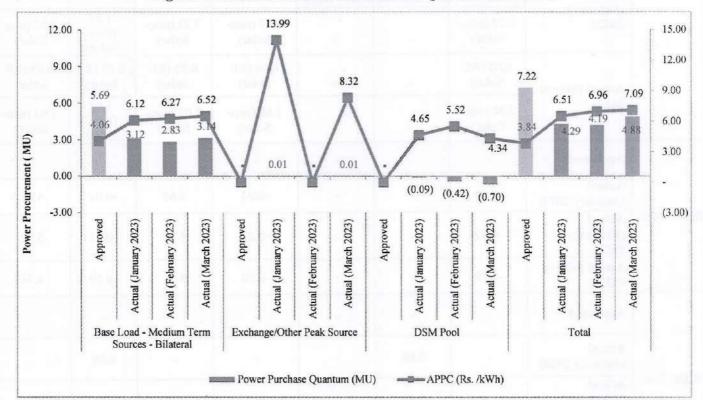


Figure 2: Variation in Power Procurement Quantum and APPC

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

Table 4: Reasons for Rate Variation for various Sources

Sr. No.	Source	Month	Approved Rate (Rs. /kWh)	Actual Rate (Rs. /kWh)	Reason for rate variation
1	Medium Term	January 2023		6.12	MBPPL procured power
	PPA - Base Load	February 2023	4.06	6.27	from GMR Energy on
	– Bilateral -	March 2023	i tik wa wa a	6.52	bilateral basis because of non-availability of any approved contracted sources.
2	Solar & Non- Solar (incl. PTC peak) RE/REC	January 2023	2.90 (Solar) 2.87	7.33 (Solar) 7.8 (non- Solar)	Market discovered rate: RE power was purchased during the period from January 2023
		February 2023	(Non- Solar)	7.72 (non- Solar)	to March 2023 from Power Exchange (GDAM and
	Elmos T	March 2023	sc incin	6.95 (Solar) 7.03 (non- Solar)	GTAM) and PTC (peak) instead of REC procurement approved in the MYT Order. The peak power purchase of

Sr. No.	Source	Month	Approved Rate (Rs. /kWh)	Actual Rate (Rs. /kWh)	Reason for rate variation
				esta i mulati al mer more an anticas ca	RE power from PTC was approved by the Commission in its Order dated 28 October, 2022 in Case No. 177 of 2022.
3	Exchange/Other	January 2023	4.40 (Short	13.99	Market discovered rate; Short
	Peak Sources	February 2023	Term PPA	-	term power purchase from
4	DSM Pool	March 2023	Rate)	8.32	Power Exchange through DAM, TAM, and RTM. The rates are higher than the approved rates as the average power purchase rates in the power exchange were higher during the months of January 2023, February 2023, and March 2023.
4	DSM Pool	January 2023	April Market	4.65	DSM rates as based on
		February 2023		5.52	supporting documents
_		March 2023		4.34	provided by MBPPL.
5	Total	January 2023	3.84	6.51	Due to above factors
		February 2023		6.96	
		March 2023		7.09	

5.17. Considering the above, the Commission allows the average power purchase cost of Rs. 6.51/kWh, Rs. 6.96/kWh and Rs. 7.09/kWh for the months of January 2023, February 2023, and March 2023, respectively as shown in Table 4 above. The increase in power purchase cost is due to reliance on Power exchange and bilateral transactions. The variation in power purchase cost is on the higher side in January 2023, February 2023, and March 2023 due to the higher cost of RE and conventional power purchase from exchange and well as contracted sources.

# 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 January 2023, February 2023, and March 2023 as shown in Table 3 above. The same has been compared with the average power purchase cost approved by the Commission in MYT Order dated 30 March, 2020 and arrived 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 5 shows the rectified Z<sub>FAC</sub> worked out by the Commission on account of difference in power purchase cost for the month of January 2023, February 2023, and March 2023.

Table 5: FAC on account of Fuel and Power Purchase Cost

S. No.	Particulars	Units	Jan-23	Feb-23	Mar-23
1	Average power purchase cost approved by the Commission	Rs./kWh	3.84	3.84	3.84
2	Actual average power purchase cost	Rs./kWh	6.51	6.96	7.09
. 3	Change in average power purchase cost (=2 -1)	Rs./kWh	2.67	3.13	3.26
4	Net Power Purchase	MU	4.29	4.19	4.88
5	Change in power purchase cost (=3 x 4/10)	Rs. Crore	1.15	1.31	1.59

## 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 6 below:

Table 6: Adjustment for over recovery/under recovery

S. No.	Particulars	Units	Jan-23	Feb-23	Mar-23
1.1	Incremental cost allowed to be recovered in Month n-4	Rs. Crore	0.39	0.40	0.37
1.2	Incremental cost in Month n-4 actually recovered in month n-2	Rs. Crore	0.40	0.37	0.36
1.3	(over-recovery)/under-recovery (=1.2 - 1.1)	Rs. Crore	-0.01	0.03	0.01
2.0	Carried forward adjustment for over- recovery/under-recovery attributable to application of ceiling limit for previous month	Rs. Crore	9.43	10.24	11.27
3.0	Adjustment factor for over-recovery/under-recovery (1.3+2.0)	Rs. Crore	9.42	10.27	11.28

# 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 Rs. 0.08 Crore, Rs. 0.08 Crore and Rs. 0.09 Crore for the months of January 2023, February 2023 and March 2023, respectively.
- 8.2. Holding cost for the month of January 2023 to March 2023 is calculated by considering MCLR + 150 basis points which turns out to be 9.80%, 9.90% and 10.00% for January 2023, February 2023, and March 2023, respectively.



8.3. The Commission has computed the holding cost towards the amount under recovered in the month of January 2023 to March 2023 which is as shown in the Table below:

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

Particulars	Units	Jan-23	Feb-23	Mar-23
Adjustment factor for over-recovery/under-recovery	Rs. Crore	9.42	10.27	11.28
Interest rate	%	9.80%	9.90%	10.00%
Carrying cost for over-recovery/under-recovery	Rs. Crore	0.08	0.08	0.09

### 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. Accordingly, as per said principle laid down by the Commission, MBPPL has carried forward the negative FAC amount and accumulated the same in the FAC Fund along with holding cost.
- 9.2. On the similar principle, the commission has allowed MBPPL to carry forward the negative FAC amount in excess of FAC fund approved in the MYT order and accumulate in the FAC fund up to March 2023 along with holding cost.
- 9.3. The Commission has determined positive FAC of Rs. 10.61 Crore, Rs. 11.63 Crore and Rs. 12.94 Crore for the months of January 2023, February 2023 and March 2023, respectively.
- 9.4. The Commission has considered SBI MCLR rate of the month plus 150 basis points which works out to be 9.80%, 9.90% and 10.00% for January 2023, February 2023, and March 2023, respectively. Accordingly, the Commission has calculated holding cost of nil for January 2023, February 2023, and March 2023 to be contributed to the FAC Pool.

## 10. <u>Disallowance due to excess Distribution Loss</u>

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 Error! Reference source not found. provides the comparison of approved and actual distribution loss and disallowance due to excess distribution loss:

Approved S. Feb-23 Particulars Units in Tariff Jan-23 Mar-23 No. Order Net Energy input at Distribution 1 MU 6.99 4.13 4.05 4.72 Voltages 2 Energy sales at Distribution voltages MU 6.92 4.43 4.29 4.38 3 Distribution Loss (1 - 2) MU 0.07 (0.29)(0.24)0.34 4 Distribution Loss as % (3/1) % 0.97% 7.08% 5.83% 7.23% 5 Annual Sliding Distribution Loss % 1.26% 1.20% 1.15% Excess Distribution Loss = [Annual Sliding Distribution Loss (4) -6 MU 0.01 0.01 0.01 Distribution loss approved] x Net Energy Input (1)

Table 7: Disallowance of FAC due to excess distribution loss

10.3. As seen from the above Error! Reference source not found, annual sliding distribution loss for the months of January 2023 to March 2023 is higher than the MYT approved distribution loss of 0.97%. The monthly distribution loss for the months of January 2023 to March 2023 is also higher than the MYT approved distribution loss of 0.97%.

Rs.

Crore

0.01

0.01

0.01

Disallowance of FAC due to excess

**Distribution Loss** 

7

10.4. The Commission observed that MBPPL has worked out disallowance of FAC due to excess Distribution Loss based on the approved annual distribution loss and the annual sliding Distribution Loss for the months of January 2023, February 2023, and March 2023. MBPPL has considered disallowance of FAC amounting to Rs. 0.01 crore, Rs. 0.01 crore and 0.01 crore due to excess distribution loss for the months of January 2023, February 2023, and March 2023, respectively since the standalone FAC for the months of January 2023, February 2023 and March 2023 is positive. The Commission considers the same for 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 January 2023, February 2023 and March 2023 which is allowed to be recovered in the billing month March 2023, April 2023 and May 2023 is as shown in the Table 8 below.

Table 8: Summary of Allowable  $Z_{FAC}$ 

Sr. No.	Particulars	Units	Jan-23	Feb-23	Mar-23
1	Calculation of Z <sub>FAC</sub>	Tana a			
1.1	Change in cost of generation and power purchase attributable to Sales within the License Area (F)	Rs. Crore	1.145	1.308	1.588
1.2	Carrying cost for over-recovery/under- recovery (C)	arrying cost for over-recovery/under-	0.077	0.085	0.094
1.3	Adjustment factor for over- recovery/under-recovery (B)	Rs. Crore	9.420	10.268	11.279
1.4	$Z_{FAC} = F + C + B$	Rs. Crore	10.642	11.661	12.960
2	Calculation of FAC Charge	Trans grubes t	en sulledu <u>r</u> e		
2.1	Energy Sales within the License Area	MU	4.072	3.996	4.660
2.2	Excess Distribution Loss	MU	0.012	0.009	0.009
2.3	Z <sub>FAC</sub> per kWh	Rs./kWh	26.06	29.11	27.76
2.4	Cap at 20% of variable component of tariff	Rs./kWh	0.903	0.903	0.903
2.5	FAC Charge allowable (Minimum of 2.3 and 2.4)	Rs./kWh	0.903	0.903	0.903
3.0	Allowable FAC		STEED LIVE DE	THE LEGISLAND	
3.1	FAC disallowed corresponding to excess Distribution Loss [(2.2 x 2.3)/10]	Rs. Crore	0.031	0.027	0.024
3.2	FAC allowable [1.4-3.1]	Rs. Crore	10.611	11.634	12.936
4.0	Utilization of FAC Fund		10.011	11.054	12.930
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. N. 3.2)	Rs. Crore	10.611	11.634	12.936
4.4	Closing Balance of FAC Fund	Rs. Crore	10.011	11.054	12.930
4.5	Z <sub>FAC</sub> leviable/refundable to consumer	Rs. Crore	10.611	11.634	12.936
5.0	Total FAC based on category wise and slab wise allowed to be recovered	Rs. Crore	0.371	0.364	0.424
6.0	Carried forward FAC for recovery during future period (4.4-5.0)	Rs. Crore	10.240	11.270	12.512

11.2. It can be seen from the above Table 8 that the standalone FAC for the month of January 2023, February 2023 and March 2023 is Rs. 10.611 Crore, Rs. 11.634 Crore and Rs. 12.936 Crore respectively. Based on energy sales and excess distribution loss, FAC per unit has



been worked out as Rs. 26.06/kWh, Rs. 29.11/kWh and Rs. 27.76/kWh for the months of January 2023, February 2023, and March 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 positive FAC per unit computed in the months of January 2023 (Rs. 26.06/kWh), February 2023 (Rs. 29.11/kWh) and March 2023 (Rs. 27.76/kWh) as shown in Table 8 above are higher than the 20% cap (Rs. 0.90/kWh) specified in MYT Regulations, 2019, hence, there is restriction triggered with regards to such ceiling.
- 11.5. Accordingly, considering the ceiling limit (Rs. 0.90/kWh), the FAC recoverable will be lower. Accordingly, due to ceiling limit (Rs. 0.90/kWh), the FAC recoverable has been worked out as Rs. 0.37 Crore, Rs. 0.36 Crore and Rs. 0.42 Crore for the month of January 2023, February 2023, and March 2023, respectively. Thus, FAC equivalent Rs. 10.24 Crore (i.e., Rs. 10.61 Crore minus Rs. 0.37 Crore) for the month of January 2023, Rs. 11.27 Crore (i.e., Rs. 11.63 Crore minus Rs. 0.36 Crore) for the month of February 2023 and Rs. 12.51 Crore (i.e., Rs. 12.94 Crore minus Rs. 0.42 Crore) for the month of March 2023 has remained unrecovered which will be recovered as part of FAC of upcoming months.
- 11.6. The Commission has also approved a holding cost of nil on the opening value of the FAC Fund available during the months of January 2023, February 2023, and March 2023. The Commission has determined a positive FAC of Rs. 10.61 Crore, Rs. 11.63 Crore and Rs. 12.94 Crore for January 2023, February 2023, and March 2023, respectively. Accordingly, this positive FAC determined by the Commission for January 2023, February 2023, and March 2023 are adjusted in the available FAC fund and the FAC fund amount at the end of June 2022 is nil. The said amount will be accumulated in FAC Fund for stabilisation of FAC in future and the benefit will not be passed to consumers.

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

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 works out FAC per unit for each category of consumer based on the formula provided in the above Regulations.
- 12.3. The following Table 9Error! Reference source not found. shows per unit Z<sub>FAC</sub> for the month January 2023, February 2023 and March 2023 to be levied on consumers of MBPPL in the billing month of March 2023, April 2023, and May 2023.

Table 9: Category wise FAC Revenue for billing month March 2023, April 2023 and May 2023

Sr. No	Consumer Category	Slabs	ZFAC computed for the month of January 2023 (Rs. Crore)	ZFAC computed for the month of February 2023 (Rs. Crore)	ZFAC computed for the month of March 2023 (Rs. Crore)
	HT Category				
1	HT- I Industrial	all units	0.306	0.300	0.351
2	HT-II Commercial	all units	5.500	0.500	0.551
	LT Category		•		
3	LT-II(A) Commercial (0-20 kW)	all units	0.001	0.001	0.001
4	LT-II (B) Commercial (above 20 kW)	all units	0.003	0.003	0.003



Sr. No	Consumer Category	Slabs	ZFAC computed for the month of January 2023 (Rs. Crore)	ZFAC computed for the month of February 2023 (Rs. Crore)	ZFAC computed for the month of March 2023 (Rs. Crore)
5	LT-III (A) Industrial (0-20 kW)	all units	0.004	0.003	0.004
6	LT-III (B) Industrial (above 20 kW)	all units	0.057	0.056	0.065
7	LT-IV – Electric Vehicle (EV) Charging Stations	all units	geinh ogen <del>-</del>		6
	Total		0.371	0.364	0.424

- 12.4. The Commission has issued MTR Order on 31 March, 2023 and approved the revised power purchase cost for FY 2022-23 in the Provisional Truing-up of FY 2022-23 and accordingly determined tariff for FY 2023-24 (effective from 1 April 2023) and FY 2024-25. Thus, the power purchase cost for FY 2021-22 and FY 2022-23 (which also includes the FAC for the period till March 2023) has already been adjusted on provisional basis along through the provisional truing up for FY 2021-22& FY 2022-23.
- 12.5. Thus, the FAC recovery for the previous months has already been allowed till March 2023. Vide MTR Order dated 31 March 2023, revised Tariff has been made effective from 1 April 2023 onwards.

